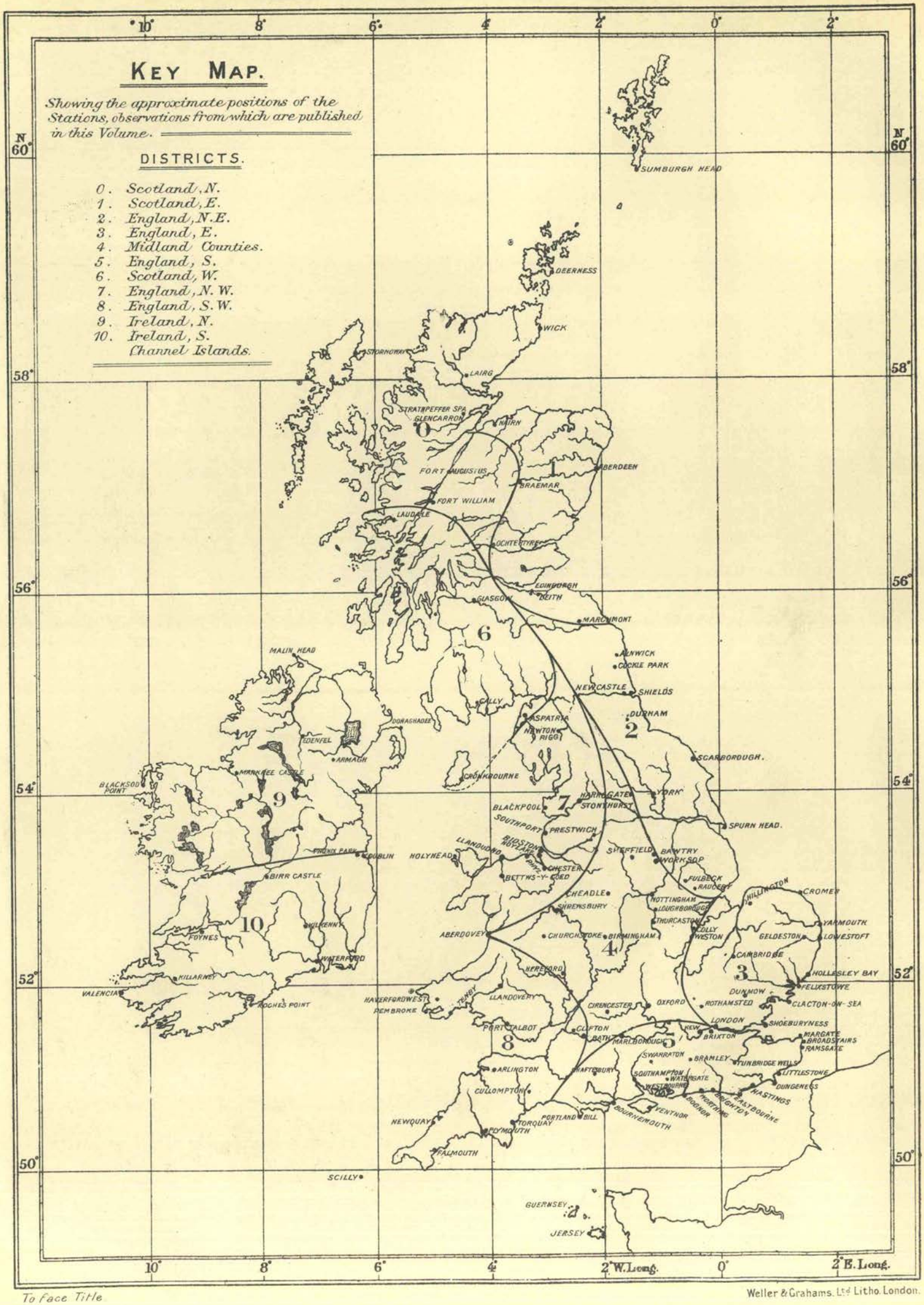


To face Title.

Weller & Grahams, Ltd Litho. London.

No. 161.

[*All Rights Reserved.*]

THE

WEEKLY WEATHER REPORT

OF THE

METEOROLOGICAL OFFICE

FOR THE YEAR

1903

(VOL. XX.—THIRD SERIES)

CONTAINING

SYNOPTIC CHARTS,

AND

DESCRIPTIVE SUMMARIES OF THE WEATHER FOR EACH DAY;

ALSO

TABULAR SUMMARIES OF TEMPERATURE, RAINFALL, AND BRIGHT SUNSHINE, FOR EACH WEEK,

WITH MONTHLY AND ANNUAL SUPPLEMENTS, TWO APPENDICES AND FRONTISPIECE MAP.

Published by the Authority of the Meteorological Council.

LONDON:
PRINTED FOR HIS MAJESTY'S STATIONERY OFFICE,
By DARLING & SON, Ltd., 34-40, Bacon Street, E.

And to be purchased, either directly or through any Bookseller, from
EYRE & SPOTTISWOODE, East Harding Street, Fleet Street, E.C.,
or OLIVER & BOYD, Edinburgh;
or E. PONSONBY, 116, Grafton Street, Dublin.

1904.

CONTENTS.

PAGE.

FRONTISPIECE MAP - - - - - - - - - to face Title.

PREFACE - - - - - - - - - - - [iii]

TABLE OF ERRATA - - - - - - - - - - [vii]

LIST OF VOLUNTEER OBSERVERS - - - - - - - - [viii]

WEEKLY REPORTS - - - - - - - - - - 1

SUMMARY :

Monthly and Annual Summaries for each Station, with Plates - - - i

APPENDICES :

I.—Summaries for each *District* for 1903, of the Values for Rainfall and Mean Temperature for each Quarter and for the Year, and of the Values for Rainfall, Accumulated Temperature and Bright Sunshine, for periods of four weeks or five weeks. The Quarterly and Yearly Summaries contain the numbers for corresponding periods in past years from 1866, for the purposes of comparison [1]

II.—Weekly and Progressive Values for each *District* for 1903 of the different elements, namely :—

Rain-Days,

Rainfall,

Accumulated Temperature above 42° F.,

Accumulated Temperature below 42° F.,

Bright Sunshine—Duration,

Bright Sunshine—Percentage - - - - [11]

1237

PREFACE.

IN the Weekly Weather Report for 1903 the general arrangement of the weekly Remarks and Tabular matter is unaltered. These will be found on the first, second, and sixth pages of each Report. The Daily Charts cover the same area as those for last year, viz.: nearly the whole of Europe and the greater part of the Mediterranean.

The Monthly and Annual Summaries contain results of the observations made at 117 to 121 stations in the British Islands, the Annual Summary being included for the first time.

Appendices I. and II. are published, as hitherto—the former with some slight modification since 1891.

DISTRICTS AND STATIONS.

For the purposes of this Report the United Kingdom is divided into eleven Districts, which are shown on the frontispiece map, distinguished by the numbers 0 to 10. There are in addition five stations in the Channel Islands, viz., Scilly (St. Mary's), Jersey (St. Aubin's and St. Heliers), and Guernsey (St. Peter Port, Villa Carey, and Fort Road), which cannot be conveniently placed in any of the Districts. The positions of the stations supplying information are marked on the map by black dots, and their names are given in the following list, arranged under the districts to which they belong :—

District.	County.	Station.
0. SCOTLAND, N.	Caithness	Wick.
	Cromarty	Strathpeffer Spa.
	Inverness	Fort Augustus.
		Fort William.
	Orkney	Deerness.
	Ross	Glencarron.
		Stornoway.
	Shetlands	Sumburgh Head.
	Sutherland	Lairg.
1. SCOTLAND, E.	Aberdeen	Aberdeen.
		Braemar.
	Berwick	Marchmont.
	Edinburgh	Edinburgh.
		Leith.
	Nairn	Nairn.
	Perth	Ochtertyre.
2. ENGLAND, N.E.	Durham	Durham.
	Lincoln	Fulbeck.
		Rauceby.
	Northumberland	Alnwick Castle.
		Cockle Park.
		Shields.
		Newcastle-on-Tyne.
	York	Scarborough.
		Spurn Head.
		York.
3. ENGLAND, E.	Cambridge	Cambridge.
	Essex	Clacton-on-Sea.
		Dunmow.
		Shoeburyness.
	Hertford	Rothamsted.
	Norfolk	Cromer.
		Geldeston.
		Hillington.
		Yarmouth.
	Suffolk	Felixstowe.
		Hollesley Bay.
		Lowestoft.
4. MIDLAND COUNTIES.	Gloucester	Cirencester.
	Hereford	Hereford.
	Leicester	Loughborough.
		Thurcaston.
	Shropshire	Shrewsbury.
	Montgomery	Churchstoke.
	Northampton	Colly Weston.
	Nottingham	Bawtry.
		Nottingham.
		Worksop.
	Oxford	Oxford.
	Stafford	Cheadle.
	Warwick	Birmingham.
	York	Sheffield.
		Harrogate.
5. ENGLAND, S.	Wiltshire	Marlborough.
	Dorset	Portland Bill.
		Shaftesbury.
	Hampshire	Bournemouth.
		Southampton.
		Swarraton.
		Ventnor Hospital.
	Kent	Broadstairs.
		Dungeness.
		Littlestone-on-Sea.
		Margate.
		Tunbridge Wells.
		Ramsgate.
	Middlesex	London (City).
		(Westminster).
	Surrey	Bramley.
		London (Brixton).
		Kew.

District.	County.	Station.
5. ENGLAND, S.—*cont.*	Sussex	Bognor.
		Brighton.
		Eastbourne.
		St. Leonards.
		Watergate.
		Westbourne.
		Worthing.
6. SCOTLAND, W.	Argyll	Laudale.
	Cumberland	Aspatria.
	Isle of Man	Cronkbourne.
	Kirkcudbright	Cally.
	Lanark	Glasgow.
7. ENGLAND, N.W.	Anglesey	Holyhead.
	Carnarvon	Bettws-y-Coed.
		Llandudno.
	Cheshire	Chester (Hawarden Bridge).
		Hoylake.
		Liverpool (Bidston).
	Cumberland	Newton Reigny.
		Newton Rigg.
	Flint	Rhyl.
	Lancashire	Blackpool.
		Manchester (Prestwich).
		Southport.
		Stonyhurst.
	Merioneth	Aberdovey.
8. ENGLAND, S.W.	Carmarthen	Llandovery.
	Cornwall	Falmouth.
		Newquay.
	Devon	Arlington.
		Cullompton.
		Plymouth.
		Torquay.
	Glamorgan	Port Talbot.
	Gloucester	Clifton.
	Pembroke	Haverfordwest.
		Pembroke.
		Tenby.
	Somerset	Bath.
9. IRELAND, N.	Armagh	Armagh.
	Donegal	Malin Head.
	Down	Donaghadee.
	Mayo	Blacksod Point.
	Sligo	Markree Castle.
	Tyrone	Edenfel.
10. IRELAND, S.	Cork	Roche's Point.
	Dublin	Dublin, City.
		Dublin, Phœnix Park.
	Kerry	Killarney.
		Valencia.
	Kilkenny	Kilkenny Castle.
	Kings County	Birr Castle.
	Limerick	Foynes.
	Waterford	Waterford.
CHANNEL ISLANDS	Channel Islands	Guernsey (Villa Carey).
		Guernsey (Fort Road).
		Jersey (St. Aubin's).
		Jersey (St. Heliers).
	Scilly Islands	Scilly (St. Mary's)

375 Wt 19 6/04 D & S 23 18061

The list for 1903 differs from that for 1902 by the omission of Colwyn Bay and Cahir and by the addition of the following stations--namely, Bettws-y-coed, Marlborough, Nottingham, Ramsgate, Shoeburyness, Shrewsbury, and Tunbridge Wells.

The Observations carried on for so long by Mr. T. G. Benn at Newton Reigny have been discontinued owing to Mr. Benn's removal, but the instruments have been transferred to the Cumberland County Council's Experimental Farm at Newton Rigg, about one mile distant, and the observations are being continued at that place by Mr. W. T. Lawrence.

WEEKLY REPORT.

The general arrangement of the weekly issues of the Report is as follows :—

I. Weekly Summary, arranged under *Districts*.
II. Weekly Summary arranged under *Stations*.
III. Daily Charts.
IV. General Notes, &c.

The information given under each of these heads may be summarised as follows :—

I. *Weekly Summary.*—The Tabular Summary on the first page of each Report gives for each week and for each *District* :—

Temperature.—The absolute highest and lowest observed, the average maximum, the average minimum, the average *daily temperature*, and its difference from the mean for the corresponding period as derived from observations extending over the 30 years 1871–1900. The values for "accumulated temperature" above 42° F. and below 42° F. for the week and for the period from the beginning of the year, and the differences from the mean values for the corresponding periods as derived from observations extending over the 20 years 1881–1900.

Rainfall.—The total fall and the number of rain-days for the week, and for the part of the year to date, together with the differences from average for the corresponding periods based on observations extending over the 35 years 1866–1900.

Bright Sunshine.—The number of hours of sunshine recorded, and the percentage ratio of that time to the whole time during which the sun is above the horizon : also the progressive values reckoned from the commencement of the year, together with the differences between these values and the means for the corresponding periods in the 20 years 1881 to 1900.

General Remarks on the weather for the week.

II. *Weekly Summary.*—This appears on the second page in each weekly issue and contains the data used in the preparation of the Summaries on the first page, the values being set out for each *Station*. The information given for each station is in nearly the same form as that presented for each District in I.

III. *Daily Charts.*—These are three in number for each day, and they show the distribution of pressure and wind over the whole of Europe at 8 a.m. and 6 p.m., and the temperature, weather, and sea disturbance at 8 a.m. each day. The maps are accompanied by a brief account of the weather conditions for the day, and the changes that had taken place since the previous day.

IV. *General Notes, &c.*—The General Notes give a brief but comprehensive account of the weather changes over Europe for the period under review. Under this heading also are printed the results, as far as regards Bright Sunshine, from a number of additional stations.

The following Rules are observed in compiling the Tables and preparing the Daily Charts :—

(1.) Daily Mean Temperature.

The daily Mean Temperature shown in the Tables in the *Weekly* Reports is calculated from the mean between the daily maxima and minima, due regard being had for the varying relation found to subsist, from month to month, between the true mean temperature of the day derived from 24 hourly observations, and the means of the daily maxima and minima for a series of years, as recorded at Greenwich and at the self-registering Observatories of the Meteorological Council.

The approximate Mean Daily Temperature for any week is found by multiplying the *difference* between the means of the seven observed maxima and minima by the proper coefficient for the month (shown in the following Table), and adding the product to the mean of the minima :—

Months.	Coefficient.
January. December.	0·520
February. November.	0·500
March. October.	0·485
April. September.	0·476
May. August.	0·470
June. July.	0·465

Example :

The mean maximum temperature for a week in December being	48·1
The mean minimum	39·3
The difference is	8·8

This difference 8·8 × ·520 (the coefficient for December) = 4·6.

This value when added to the mean minimum (39·3) gives 43°·9, the requir d mean daily temperature of the week.

(2.) Accumulated Temperature.

The Tables of Accumulated Temperature are designed to give persons engaged in agriculture better means of estimating the manner in which vegetation is affected by temperature than that afforded by the more usual methods of treating the readings of the thermometer. They show for each *Station* and for each *District* for each week, and for the whole period from the commencement of the year, the weekly and progressive values, respectively, of the combined amount and duration of the excess or defect of the air temperature, above or below a suitably fixed standard, or *base temperature*. The base adopted is 42° F., as being nearly equivalent to 6° C. This has been considered by Continental writers on these subjects to be the critical value, the temperature above which is mainly effectual in starting and maintaining the growth, and in completing the ripening, of agricultural crops in a European climate. This base is also convenient as being 10° F. above the freezing point on the Fahrenheit scale.

The Accumulated Temperature is expressed in "Day-degrees,"—a Day-degree signifying 1° F. of excess or defect of temperature above or below 42° F. continued for 24 hours, or any other number of degrees for an inversely proportional number of hours.

When the temperature during any period remains either wholly above or below the base temperature, the difference between the base and the mean temperature of the day gives the correct accumulated temperature. In other cases this difference gives only an approximate value for the accumulated temperature, not departing greatly from the truth—the deviation depending on the greater or less extent of the variations of the temperature above or below the base. Further, since the mean between the maximum and minimum of any day is nearly equal to the mean temperature of the day, the difference of the mean of the maximum and minimum from the base will also give, directly, an approximation to the accumulated temperature for the day.

The following rules, however, supply a still closer approximation to the true values sought, and they have been adopted for the preparation of the Tables in this Report. They may be applied to any other base temperature as well as to 42° F., with the slight modification of the numerical coefficients mentioned below.

RULES for computing, for a WEEKLY PERIOD, from the observed MAXIMA and MINIMA, the ACCUMULATED TEMPERATURE above or below 42° F.

1. Obtain the mean temperature, from the means of the seven observed maxima and minima, in the manner already described for daily values.

2. In obtaining the accumulated temperature four cases may occur, to which the following rules will apply :—

Conditions of Temperature.	To obtain the daily Accumulated Temperature.	
	Above 42° F.	Below 42° F.
If the minimum is *above* 42° F. or *equal* to 42° F. -	Subtract 42° F. from the mean.	There is none.
If the minimum is *below* 42° F., but the mean for the day is *above* 42° F.	From the difference between the mean for the day and the minimum deduct the accumulated temperature below 42° F., calculated as stated in the next column.	The required quantity is the excess of 42° F. over the minimum, multiplied by the co-efficient 0·4.
If the mean for the day is *below* 42° F., but the maximum is *above* 42° F.	The required quantity is the excess of the maximum over 42° F., multiplied by the co-efficient 0·4.	From the difference between the mean for the day and the minimum deduct the accumulated temperature above 42° F., calculated as stated in the preceding column.
If the maximum is *below* 42° F. or *equal* to 42° F. -	There is none.	Subtract the mean from 42° F.

In each of the above cases the result will be the *average daily* value, and must be multiplied by 7 in order to obtain the value for the whole week.

The coefficient varies with the duration of the period, and also with the base temperature.

The coefficient given above, in cases 2 and 3, is for a weekly period, and for the base temperature 42° F. The following are its values for other base temperatures,—for 32° F., 0·4 ; for 52° F., 0·33 ; for 62° F., 0·25.

A full explanation of the principles on which these rules are based will be found in Appendix II. to the Quarterly Weather Report for 1878.

(3.) DAILY CHARTS.

In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus :⟶⟶⟶ = a heavy gale ; ⟶⟶ = a gale ; ⟶ = a fresh to strong breeze ; ⟶ = a light to moderate breeze ; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows :—b = blue sky ; c = detached clouds ; o = overcast ; m = misty (hazy) ; f = foggy ; q = squally ; r = rain ; h = hail ; s = snow ; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Belgium, Holland, and Spain ; at 7 a.m. in Germany, Denmark, Norway, and Sweden ; at 6.51 a.m. in France and Algeria ; at 6 a.m. in Italy and Austria ; at 5.25 a.m. in Greece ; at 4.59 a.m. in Russia ; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from observations taken at 6 p.m. in the British Islands, Belgium, and Spain ; 4 p.m. in Portugal ; 5.25 p.m. in Greece ; 5.51 p.m. in France ; 6.51 p.m. in Algeria ; 6.59 p.m. in Russia ; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden ; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

MONTHLY AND ANNUAL SUMMARIES.

The Monthly Summaries for 1903 have been continued on the plan adopted in 1902. They now comprise results from 121 stations in the British Islands.

Of the additional stations included for the first time some rank as Normal Climatological Stations, and give full returns of pressure, temperature, humidity, cloud, rainfall, wind, and weather. Others are Climatological, and yield information as to temperature, rainfall, and in some cases sunshine, while others supply only the sunshine record.

The Summary for January, 1903, contained results for 117 stations, whilst that for December comprised returns from 121 stations.

Each Monthly Summary includes :—

1. A Plate containing 4 charts, showing—
   - (1.) The Monthly Barometric pressure and Winds based on the 8 a.m. readings.
   - (2.) The Movements of Depressions.
   - (3.) The Distribution of Mean Temperature, and
   - (4.) The Monthly Rainfall.
2. Remarks on the Weather over the British Islands.
3. Table of results for the month from 46 stations giving full returns.
4. Table of results for the month, as far as available, of the observations of Temperature, Rainfall and Sunshine, at the remainder of the stations (75 in number in December).

An Annual Summary, which is included for the first time, gives corresponding data for the whole year.

APPENDICES.

Appendix I.—This contains for each of the eleven *Districts* and for the Channel Islands :—

1. Summaries for each Quarter and for the Year, of the Temperature and Rainfall records, with similar information for the past years of the period of 38 years, 1866–1903.

2. Tables giving for 1903, *for periods of* 4 *weeks and* 5 *weeks*, the progressive numbers of—

   Rain-Days.
   Rainfall.
   Accumulated Temperature above 42° F.
   Accumulated Temperature below 42° F.
   Bright Sunshine, Duration, and
   Bright Sunshine, Percentage.

Appendix II.—This contains for each of the eleven *Districts* and for the Channel Islands :—

Tables giving for 1903 the *weekly* and *progressive* values of—

Rain-Days.
Rainfall.
Accumulated Temperature above 42° F.
Accumulated Temperature below 42° F.
Bright Sunshine, Duration, and
Bright Sunshine, Percentage.

Tables showing for each degree of Latitude from 49° *N. to* 58° *N., and for each Weekly and Four-Weekly or Five-Weekly period, the total numbers of hours during which the Sun is above the Horizon, together with their Reciprocals, are given in the Preface to The Weekly Weather Report for* 1884, *while similar information for the Calendar Months is given in the Preface to The Monthly Weather Report for* 1884.

ERRATA IN THE MONTHLY SUMMARIES.

Owing to the receipt of later information from the stations, the values in the Tables in the Monthly Summaries are shown to be in error as set out below. The corrections are, however, in most cases but slight, and in those marked with an asterisk the alteration in the Mean Temperature does not exceed 0°·1.

January,	p. iv.	... London.—Sunshine. For "22·6, —2·8, 9, —1," read "31·1, + 5·7, 12, + 2."
		Liverpool.—Temperature—Mean. For "35°·7" read "39°·7."
		Valencia.—Sunshine. For "12, —10," read "13, —9."
	p. v. ...	... London.—Number of rain-days. For "17" read "16."
	p. vi.	... * Scarborough.—Temperature. For "35°·2, 44°·5, 39°·9, + 1°·7," read "35°·5, 44°·5, 40°·0, + 1°·8."
		Sunshine. For "32·1, 13," read "32·6, 14."
		* Hillington.—Temperature. For "33°·6, 41°·1, 38°·9, + 2°·2," read "33°·4, 44°·1, 38°·8, + 2°·1."
		* Hereford.—Temperature—Mean maximum. For "43°·8" read "43°·9."
		Rainfall. For "18, 3·12, + 0·66," read "19, 3·37, + 0·91."
		* Shaftesbury.—Temperature. For "? 35°·7, ? 43°·6, ? 39°·7, + 2°·5," read "? 35°·5, ? 43°·6, ? 39°·6, + 2°·4."
		Shaftesbury.—Absolute Maximum. For "54° on 5th" read "51° on 9th."
	p. vii.	... * Llandudno.—Temperature. For "37°·2" read "37°·1," and for "24 on 13th and 15th" read "23 on 14th."
		Arlington.—Rainfall. For "7·56, + 3·10," read "7·49, + 3·03."
February,	p. xiii.	... Jersey.—Weather—Number of days of hail. For "6" read "5."
	p. xiv.	... Fort Augustus.—Rainfall. For "11·31, + 7·40," read "10·50, + 6·59."
		* Scarborough.—Temperature. For "50°·6, 44°·2, + 5°·0," read "50°·4, 44°·1, + 4°·9."
		Hereford.—Temperature. "For 38°·5, 50°·5, 44°·5, + 4°·7," read "38°·8, 50°·5, 44°·7, + 4°·9."
		* Shaftesbury.—Temperature. For "47°·2, 43°·3 + 4°·3," read "47°·4, 43°·4, + 4°·4."
	p. xv.	... * Llandudno.—Temperature. For "42°·1, 50°·7, 46°·4, + 4°·5," read "42°·3, 50°·7, 46°·5, + 4°·6."
March,	p. xxi.	... Shields.—Rainfall. For "1·15, — 0·59, and 16 days," read "1·10, — 0·64, and 15 days."
	p. xxii.	... Scarborough.—Temperature. For "36°·7, 51°·3, 44°·0, + 2°·9, 30° on 10th," read "37°·1, 51°·3, 44°·2, + 3°·1, 32° on 1st, 4th."
		* Hillington.—Temperature. For "37°·4, 53°·0, 45°·2, + 3°·8," read "37°·6, 53°·0, 45°·3, + 3°·9."
		Rainfall. For "24th" read "23rd."
		* Shaftesbury.—Temperature. For "38°·7, 49°·8, 44°·3, + 3°·3," read "38°·6, 49°·8, 44°·2, + 3°·2."
		Rainfall. For "33·9, + 1·27," read "37·9, + 1·67."
	p. xxiii.	... Arlington.—Rainfall. For "7·78, + 4·34," read "7·58, + 4·14."
April,	p. xxix.	... Spurn Head.—Weather—Number of days of thunderstorm. For "0" read "1."
	p. xxx.	... Scarborough.—Temperature. For "35°·3, 48°·8, 42°·1, — 2°·6," read "35°·1, 48°·7, 41°·9, — 2°·8."
		Shoeburyness.—Temperature—Absolute maximum. For "59° on 20th" read "59° on 25th."
		Cheadle.—Temperature. For "35°·3, 49°·0, 42°·2, — 2°·7," read "35°·0, 49°·0, 42°·0, — 2°·9."
		* Swarraton.—Temperature. For "35°·2, 51°·4, 43°·3, — 2°·4," read "35°·0, 51°·4, 43°·2, — 2°·5."
		Shaftesbury.—Temperature. For "36°·9, 51°·2, 44°·1, — 2°·0," read "36°·5, 51°·2, 43°·9, — 1°·8."
May,	p. xxxviii	... * Scarborough.—Temperature. For "41°·5, 54°·6, 48°·1, — 1°·2 and 32° on 24th," read "41°·8, 54°·6 48°·2, — 1°·1, and 33° on 12th."
		* Cheadle.—Temperature. For "43°·3, 57°·6, 50°·5, + 0°·8," read "43°·1, 57°·6, 50°·4, + 0°·7."
		* Hereford.—Temperature. For "60°·9, 52°·1, + 0°·1," read "61°·1, 52°·2, + 0°·2."
	p. xxxix.	... * Blackpool.—Temperature. For "44°·5, 58°·5, 51°·5, + 0°·7," read "44°·3, 58°·5, 51°·4, + 0°·6."
June,	p. xlvi.	... Scarborough.—Temperature. For "45°·9, 59°·4, 52°·7, — 3°·0, 40° on 1st, 21st, 23rd," read "46°·3 59°·4, 52°·9, — 2°·8, 40° on 1st, 21st, 22nd.
		* Shaftesbury.—Temperature. For "47°·4, 61°·7, 54°·6, — 2°·3," read "47°·2, 61°·7, 54°·5, — 2°·4."
	p. xlvii.	... Blackpool.—Temperature. For "47°·1, 63°·0, 55°·1, — 1°·9," read "46°·8, 63°·0, 54°·9, — 2°·1."
July,	p. lii.	... Birr Castle.—Sunshine. For "127·7, — 11·5, 26, — 2," read "132·7, — 6·5, 27, — 1."
	p. liii.	... * Scilly.—Cloud. For "6·8" read "6·6."
	p. liv.	... Lowestoft.—Sunshine. For "177·7, 36," read "178·7, 36."
		* Cheadle.—Temperature. For "50·7, 65·1, 57·9, — 0·7," read "50·7, 65·3, 58·0, — 0·6."
	p. lv.	... Haverfordwest.—Sunshine. For "190·9, 39," read "188·8, 38."
August,	p. lxii.	... * Scarborough.—Temperature. For "48°·4, 64°·8, 56°·6, — 2°·2," read "48°·4, 64°·5, 56°·5, — 2°·3."
		Hereford.—Temperature. For "49°·4, 65°·4, 57°·4, — 3°·2," read "49°·5, 65°·6, 57°·6, — 3°·0."
		Rainfall—Number of days. For "17" read "18."
	p. lxiii.	... Falmouth.—Sunshine. For "202·0, — 11·4, 46, — 2," read "201·8, — 11·6, 46, — 2."
		* Temperature. For "47°·6, 61°·3, 54°·5, — 0°·7," read "47°·9, 61°·3, 54°·6, — 0°·6."
September,	p. lxx.	... Scarborough.—Sunshine. For "146·6, 39," read "146·1, 39."
		* Hereford.—Temperature. For 46°·8, 63°·8, 55°·3, — 0°·7," read "46°·8, 63°·5, 55°·2, — 0°·8."
	p. lxxi.	... Arlington.—Rainfall. For "19, 4·91, + 0·07," read "18, 4·82, — 0·02."
		Blackpool.—Temperature. For "48°·6, 62°·1, 55°·4, — 0°·1," read "48°·3, 62°·1, 55°·2, — 0°·3
October,	p. lxxviii.	... Fort Augustus.—Rainfall. For "7·30, + 3·12," read "7·25, + 3·07."
		Swarraton.—Temperature. For "46°·8, 56°·4, 51°·6 + 3°·6," read "45°·9, 56°·4, 51°·2, + 3°·2."
		Shaftesbury.—Temperature. For "46°·9, 59°·6, 53°·3, + 5°·3," read "46°·8, ? 56°·2, ? 51°·5, ? + 3°·5."
		Extreme Maximum. For "66° 1st, 2nd, 5th," read "—, —."
November,	p. lxxxv.	... London.—Rainfall—Difference from average. For "— ·020" read "— 0·20."
	p. lxxxvi.	... Hereford.—Extreme Maximum Temperature. For "58°, 1st," read "56°, 12th, 23rd."
December,	p. xcii.	... * Laudale.—Temperature. For 34°·6, 43°·7, 39°·2, — 1°·4," read "34°·4, 43°·7, 39°·1, — 1°·5."
		Hereford.—Rainfall. For "13, 1·83, — 0·67," read "14, 1·98. — 0·52."

Annual Weather Chart, Plate XIII., Map 4.—The rainfall values entered to Plymouth and Falmouth respectively must be transposed.

NOTE.—Till September the entries for Bath under Cloud-amount and Numbers of Days of Clear Sky and Overcast are doubtful, and should be rejected.

ADDITIONAL ERRATUM FOR 1902.

August,	p. lxii.	... Braemar.—Temperature. For "44°·3, 57°·9, 51°·1, — 2°·9," read "43°·7, 57°·9, 50°·8, — 3°·2."

THE following is a LIST of the VOLUNTEER OBSERVERS to whom the Council are indebted for observations contributed to the WEEKLY WEATHER REPORT and published either in the Weekly Issues or in the Monthly Summaries during 1903, together with the NAMES and ALTITUDES of their STATIONS :—

Names of Stations.	Altitude above Mean Sea Level.	Names of Observers.
	Feet.	
* Aberdovey	—	John Edwards.
Alnwick Castle	210	Robert Kyle, for the Duke of Northumberland, K.G.
Arlington (N. Devon)	613	Lady Chichester.
Armagh	196	J. L. E. Dreyer, Ph.D., and Staff of Observatory.
Aspatria	250	J. Smith Hill, B.Sc.
Bawtry (Hesley Hall).	65	B. I. Whitaker, J.P., F. R. Met. Soc.
Bath	66	W. H. Symons, M.D., for the Corporation.
Bettws-y-Coed	101	Douglas Macdonogh, M.D.
Birmingham (Edgbaston).	534	Alfred Cresswell, for the Midland Institute.
ℳ Blackpool	62	F. J. H. Coutts, M.D., for the Corporation.
Bognor	14	H. C. L. Morris, M.D., for the Corporation.
* Bournemouth	—	C. Dales, for the Corporation.
$ Braemar	1,111	J. Aitken, J.P.
Bramley (Surrey)	148	J. Bartlett, M.A.
Brighton	65	A. Newsholme, M.D., for the Corporation.
Broadstairs	—	W. H. White, for the District Council.
$ Cally	46	W. Thomson, for H. G. Murray Stewart.
Cambridge	83	Miss A Walker and H. J. Bellamy, for Sir Robert Ball, F.R.S.
ℳ Cheadle	646	J. C. Philips.
Chester (Hawarden Bridge).	22	F. B. Summers.
ℳ Churchstoke	538	P. Wright, F.C.S., F. R. Met. Soc.
Cirencester	446	Prof. G. T. Locke, M.A., for the R. A. College.
Clacton-on-Sea	54	A. W. Shadick, for the Town Council
Clifton	230	D. Rintoul, M.A.
Cockle Park, near Morpeth.	324	J. H. J. Farquhar, for County Council.
Colly Weston	280	Miss Amy Tasker.
Cromer	196	W. H. Archer, for the District Council.
Cronkbourne, Douglas.	137	A. W. Moore, M.A., M.V.O., J.P.
ℳ Cullompton	202	T. Turner, J.P., F. R. Met. Soc.
Deerness	160	M. Spence.
Douglas, Isle of Man	137	*See* Cronkbourne.
Dublin (City)	47	Sir John W. Moore, M.D., F. R. Met. Soc.
„ (Phœnix Park)	155	Colonel Sim, R.E., C.B.
Dunmow	297	Thomas Hacking, for the Countess of Warwick's Agricultural School.
Durham	336	Prof. R. A. Sampson, M.A., F.R.S.
Eastbourne	39	R. Sheward, F. R. Met. Soc., for the Corporation.
Edenfel (Omagh)	300	Col. Buchanan, C.B., F. R. Met. Soc.
* Edinburgh	253	Regius Keeper, Botanic Gardens.
Felixstowe	76	Rev. J. G. Munday, M.A., and F. Mills, for the Urban District Council.
$ Fort Augustus	68	Rev. C. von Dieckhoff.
Foynes	108	W. H. Ward, for Lord Monteagle, K.P.
Fulbeck	185	Rev. Vere F. Willson, M.A.
Geldeston	37	E. T. Dowson, F. R. Met. Soc.
Glasgow	180	Staff of Observatory.
$ Glencarron	489	D. D. Munro, for Lord Maclaren.
* Guernsey (Villa Carey).	180	F. E. Carey, M.D., F. R. Met. Soc.
Guernsey (Fort Road).	295	A Collenette, F. R. Met. Soc.
Harrogate	476	G. Paul, for the Corporation.
Hastings (St. Leonards).	178	H. Colborne, M.R.C.S., for the Corporation.
* Haverfordwest	—	J. W. Phillips.
ℳ Hereford (Belmont).	291	Rev. T. B. Harrington, O.S.B.
ℳ Hillington	88	Rev. H. E. B. Ffolkes, M.A., F. R. Met. Soc
Hollesley Bay	38	Prof. C. G. Freer Thonger, F.C.S.
* Hoylake	30?	L. G. Dashper, for Town Council.
* Jersey (St. Heliers)	—	Commanding Officer, Fort Regent.
Kilkenny Castle	212	H. Carlton, for the Marquis of Ormonde, K.P.
Killarney	174	E. W. Griffin, M.D.
$ Lairg	335	Rev. J. K. Maclean.
Laudale	14	J. A. Fletcher, for T. H. G. Newton, M.A., F. R. Met. Soc.
Littlestone-on-Sea	—	H. T. Tubbs.
Llandovery	217	J. S. Rosser, M.D.
ℳ Llandudno	72	W. Little, for Town Council.
* London (Bunhill Row).	80	Messrs. De la Rue.
* London Westminster).	—	H. A. Reatchlous, M.A.
Lowestoft	84	C. W. Edwards, F.R. Met. Soc., for the Corporation.
$ Marchmont	498	J. A. Wood, for Sir H. P. Campbell, Bt.
* Margate	83	J. Stokes, J.P., F. R. Met. Soc.
Markree Castle	122	J. R. Armstrong, for the trustees of *the late* Col. Cooper, F.R.A.S.
ℳ Marlborough	424	J. C. Alsop.
Newcastle-on-Tyne.	152	N. H. Martin, F.C.S., F.R.S.E.
* Newquay	250?	A. Hardwick, M.D., and C. C. Vigurs, for Town Council.
Newton Reigny	579	T. G. Benn.
Newton Rigg	559	W. T. Lawrence, for the Cumberland County Council.
Nottingham	82	J. Brown, A.M.I.C.E., City Engineer.
$ Ochtertyre	329	G. Croucher, for Sir P. K. Murray, Bt.
Oxford	202	A. A. Rambaut, M.A., F.R.S.
Plymouth	116	H. Victor Prigg, A.M.I.C.E.
Port Talbot	179	G. Lipscombe, for Miss Talbot.
Prestwich	320	T. R. H. Clunn, M.D., F. R. Met. Soc.
* Ramsgate	—	T. J. Taylor, C.E., for the Corporation.
Rauceby Hall	125	J. Hope, for General Sir M. Willson, K.C.B.
Rothamsted	368	The Lawes Agricultural Trust.
* Rhyl	30	A. A. Goodall, for District Council.
ℳ Scarborough	62	W. W. Larkin, for the Corporation.
ℳ Shaftesbury	722	Miss L. H. Harris and Rev. F. Ehlvers.
Sheffield	429	E. Howarth, F.R.A.S.
Shoeburyness	18	Asst. Supt. of Experiments.
Shrewsbury	191	Capt. C. St. B. Sladen, R.E.
Southampton	78	A. Vaughan, R.E., for the Ordnance Survey.
Southport	21	J. Baxendell, F. R. Met. Soc.
Stonyhurst	375	Staff of Observatory.
Strathpeffer Spa	253	R. Fortescue Fox, M.D.
ℳ Swarraton	310	Rev. W. L. W. Eyre, M.A., F. R. Met. Soc.
* Tenby	79	R. J. Truscott, for the Corporation.
* Thurcaston	253	Rev. T. A. Preston, M.A., F. R. Met. Soc.
* Torquay	286	F. March, for the Corporation.
ℳ Tunbridge Wells	419	F. G. Smart, M.A., M.B., F. R. Met. Soc.
Ventnor Hospital	80	C. Lewis, M.B., and Miss M. Gibson.
Waterford	100	J. N. White.
* Watergate	236	W. M. Christy.
* Westbourne	30	Rev. L. B. Birkett, M.A.
* Worksop	56	H. Mellish, J.P., F. R. Met. Soc.
* Worthing	38	C. Kelly, M.D., for the Corporation.
York	56	H. M. Platnauer, B.Sc.
* York	106	H. Richardson, M.A.

Stations marked "ℳ" report through the Royal Meteorological Society ; those marked "$" through the Scottish Meteorological Society.

NOTE.—The heights given are, as far as possible, those of the ground on which the rain-gauge stands. [taken as those of the Sunshine Recorders above the Sea.
* Where a station is prefixed by a star it indicates that the information published in this Volume is for Sunshine only. In these cases the heights given may be

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 1.] *Fourth Series.* WEEK ENDING SATURDAY, JANUARY 10TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 2.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	47	24	39·3	31·8	35·7	2 below	0	− 6	44	+ 8	0	− 6	44	+ 8
	1. SCOTLAND, EAST	47	23	39·4	31·6	35·6	1 below	0	− 7	45	+ 3	0	− 7	45	+ 3
	2. ENGLAND, N.E.	52	30	45·9	36·0	41·2	3 above	11	+ 4	25	−12	11	+ 4	25	− 12
	3. ENGLAND, EAST	56	30	49·4	39·7	44·7	7 above	29	+21	6	−35	29	+ 21	6	− 35
	4. MIDLAND COUNTIES	57	29	48·4	37·5	43·1	6 above	27	+18	13	−29	27	+ 18	13	− 29
	5. ENGLAND, SOUTH	54	29	50·6	43·2	47·0	8 above	35	+23	0	−32	35	+ 23	0	− 32
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	50	27	43·0	34·5	38·9	1 below	3	− 8	28	− 2	3	− 8	28	− 2
	7. ENGLAND, N.W.	55	28	47·5	37·2	42·6	3 above	24	+14	13	−16	24	+ 14	13	− 16
	8. ENGLAND, S.W.	57	30	51·1	41·5	46·5	6 above	34	+18	1	−22	34	+ 18	1	− 22
	9. IRELAND, NORTH	55	24	43·4	33·8	38·8	1 below	4	− 9	31	+ 5	4	− 9	31	+ 5
	10. IRELAND, SOUTH	53	25	47·4	37·5	42·6	1 above	23	+ 2	13	− 7	23	+ 2	13	− 7
	— CHANNEL ISLANDS	56	45	52·8	47·2	50·1	6 above	57	+33	0	−10	57	+ 33	0	− 10

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 2.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	11	2 less	6	+ 1	1·1	− 0·2	3	− 2	7	− 5	3	− 2	7	− 5
	1. SCOTLAND, EAST	6	19	13 more	6	+ 2	1·9	+ 1·3	5	− 4	10	− 7	5	− 4	10	− 7
	2. ENGLAND, N.E.	6	14	9 more	6	+ 2	1·4	+ 0·9	8	+ 1	16	+ 2	8	+ 1	16	+ 2
	3. ENGLAND, EAST	4	6	1 more	4	0	0·6	+ 0·1	11	+ 1	21	+ 2	11	+ 1	21	+ 2
	4. MIDLAND COUNTIES	6	12	6 more	6	+ 2	1·2	+ 0·6	7	− 1	14	− 3	7	− 1	14	− 3
	5. ENGLAND, SOUTH	6	11	5 more	6	+ 2	1·1	+ 0·5	4	− 5	8	−10	4	− 5	8	−10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	23	11 more	6	+ 1	2·3	+ 1·1	5	− 3	9	− 6	5	− 3	9	− 6
	7. ENGLAND, N.W.	7	17	9 more	7	+ 3	1·7	+ 0·9	5	− 2	9	− 4	5	− 2	9	− 4
	8. ENGLAND, S.W.	7	23	13 more	7	+ 3	2·3	+ 1·3	8	− 4	14	− 7	8	− 4	14	− 7
	9. IRELAND, NORTH	6	24	16 more	6	+ 1	2·4	+ 1·6	5	− 4	10	− 8	5	− 4	10	− 8
	10. IRELAND, SOUTH	7	22	12 more	7	+ 2	2·2	+ 1·2	4	− 8	7	−16	4	− 8	7	−16
	— CHANNEL ISLANDS	7	14	6 more	7	+ 2	1·4	+ 0·6	5	− 8	9	−13	5	− 8	9	−13

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was very unsettled throughout the period. Rain was frequent, and at times very heavy, while towards the end of the week a good deal of sleet or snow was experienced in the northern districts.

Temperature was much above the mean over England, the excess ranging from as much as 8° in England S., and 7° in England E., to 3° in England N.W. Over Scotland and in Ireland N. it was much lower, the averages for the week being a little below the normal for the time of year. The highest of the maxima were recorded during the earlier days of the period, and varied from 57° in the Midland Counties and England S.W., to 47° in Scotland N. and E. The lowest of the minima, which occurred as the week drew towards its close, ranged from 23° or 24° in Scotland N. and E., and from 24° or 25° in Ireland, to 30° in England E., N.E., and S.W., and to 45° in the Channel Islands.

Rainfall was much in excess of the mean over the Kingdom generally, but only slightly so in England E., and a little less than the normal in Scotland N. More than an inch was measured at many south-western and southern stations on Monday, and at several northern and north-western stations on Saturday. At Malin Head the fall for the twenty-four hours ending 8 a.m. on the 10th was as much as 2·04 ins.

Bright Sunshine was very deficient over the Kingdom as a whole, but a little more than the mean in England E. The percentage of the possible duration ranged from 21 in the district just named, to 10 or less in most other localities, and to 7 in Scotland N. and Ireland S.

Barometer and Wind.—During the whole of this period cyclonic disturbances of considerable depth appeared over our Islands from the Atlantic, bringing strong winds and occasional gales to all our coasts—from between South and West in the western and southern districts, but sometimes from the North-Eastward in the extreme north. Most of these systems passed on to Scandinavia, but at the end of the week a well-marked and deep disturbance, whose centre had advanced to the Isle of Man, began to move Southwards, and, a brisk rise of the barometer taking place simultaneously in the north, the wind shifted to the Northward or North-Eastward over the whole Kingdom, and blew a strong to whole gale in Scotland and the north of Ireland.

207 | 90 Wy & S. Ltd.
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 1 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	43	31	39·1	34·3	36·8	− 2·4	0	36	7	0·50	− 0·42	*	*	*	*
	Stornoway	45	30	40·7	32·3	36·7	− 2·1	0	37	7	1·33	+ 0·17	4·9	− 1·4	11	− 3
	Wick	42	27	40·4	32·7	36·7	− 1·1	0	37	7	1·55	+ 0·98	*	*	*	*
	Lairg Ⓢ	41	24	36·3	30·3	33·4	− 1·4	0	60	3	0·66	− 0·18	*	*	*	*
	Glencarron Ⓢ	43	24	38·2	29·4	34·0	− 3·1	0	56	6	1·05	− 1·23	*	*	*	*
	Fort Augustus Ⓢ	43	25	39·1	30·7	35·1	− 3·1	0	48	5	1·18	+ 0·04	2·8	− 0·2	6	0
	Fort William	47	29	41·1	32·9	37·2	− 1·6	0	34	6	1·27	− 0·89	2·3	− 2·2	5	− 5
1. SCOTLAND E.	Nairn	40	27	37·7	31·3	34·6	− 2·9	0	52	5	1·19	+ 0·73	*	*	*	*
	Aberdeen	45	29	40·1	33·0	36·7	− 0·9	0	37	5	1·96	+ 1·40	7·6	− 3·0	16	− 6
	Braemar Ⓢ	40	23	35·7	27·7	31·9	− 2·3	0	71	6	0·98	+ 0·30	*	*	*	*
	Ochtertyre Ⓢ	45	25	39·0	30·6	35·0	− 1·7	0	49	7	2·42	+ 1·36	*	*	*	*
	Leith	46	31	41·7	34·6	38·3	− 0·8	0	26	7	2·72	+ 2·31	*	*	*	*
	Marchmont Ⓢ	47	28	42·1	32·1	37·3	+ 0·9	0	36	5	2·31	+ 1·69	6·8	− 1·7	14	− 4
2. ENGLAND, N.E.	Alnwick Castle	48	30	43·1	34·7	39·1	+ 1·3	3	28	7	2·75	+ 2·21	*	*	*	*
	Durham	51	30	44·5	33·2	39·1	+ 2·2	7	34	6	1·14	+ 0·67	10·0	0·0	20	0
	Shields	52	32	45·0	36·6	41·0	+ 2·4	8	22	6	1·49	+ 1·07	*	*	*	*
	Scarborough Ⓜ	52	30	47·4	34·9	41·4	+ 2·9	15	30	7	1·07	+ 0·57	2·9	—	6	—
	Spurn Head	51	35	47·0	38·4	42·9	+ 4·4	21	10	6	0·93	+ 0·57	*	*	*	*
	Fulbeck (Lincolnshire)	52	33	48·4	37·9	43·4	+ 6·9	27	11	6	0·70	+ 0·30	10·6	—	20	—
3. ENGLAND, E.	Hillington Ⓜ	54	34	49·6	39·5	44·8	+ 8·0	30	7	3	0·51	+ 0·03	13·5	+ 3·9	25	+ 7
	Yarmouth	52	36	48·4	39·7	44·2	+ 6·7	25	6	4	0·37	− 0·09	*	*	*	*
	Geldeston	54	34	49·8	40·8	45·5	+ 7·6	30	3	5	0·45	+ 0·05	9·9	− 1·4	18	− 3
	Cambridge	56	32	50·9	39·1	45·2	+ 7·7	35	8	3	0·65	+ 0·30	11·4	+ 1·0	21	+ 2
	Felixstowe	52	35	48·2	40·7	44·6	+ 6·3	24	4	3	0·64	—	11·0†	—	20†	—
	Rothamsted	54	30	49·2	38·2	43·9	+ 6·5	29	11	6	0·92	+ 0·36	9·2	− 0·4	17	− 1
4. MIDLAND COUNTIES	Harrogate	51	30	46·1	34·4	40·5	+ 3·6	11	31	6	1·21	+ 0·63	9·9	—	19	—
	Bawtry (Hesley Hall)	53	32	48·1	36·9	42·7	+ 5·3	26	14	6	1·06	+ 0·64	*	*	*	*
	Loughborough	53	31	48·4	38·4	43·6	+ 6·0	26	10	6	0·90	+ 0·43	*	*	*	*
	Colly Weston (Stamford)	52	34	48·1	38·4	43·4	+ 6·5	25	10	5	0·59	+ 0·14	*	*	*	*
	Cheadle Ⓜ	51	30	46·9	36·4	41·9	+ 5·3	14	25	7	1·16	+ 0·53	*	*	*	*
	Birmingham (Edgbaston)	52	34	49·1	39·0	44·3	+ 6·4	29	8	6	0·86	+ 0·37	5·5	—	10	—
	Churchstoke Ⓜ	53	30	48·4	37·1	43·0	+ 5·3	28	14	7	1·87	+ 1·21	7·2	− 2·7	13	− 5
	Hereford Ⓜ	53	32	48·6	38·2	43·6	+ 5·2	27	11	6	1·40	+ 0·84	*	*	*	*
	Cirencester	57	29	50·7	35·3	43·3	+ 5·8	37	19	7	1·40	+ 0·75	8·1	− 2·2	15	− 4
	Oxford	54	34	49·4	40·4	45·1	+ 6·7	28	4	6	1·36	+ 0·89	9·8	− 0·1	18	0
5. ENGLAND, S.	London	54	35	51·1	41·6	46·5	+ 7·6	33	1	5	0·94	+ 0·49	6·3‡	+ 1·3‡	12‡	+ 2‡
	Swarraton (Alresford) Ⓜ	53	29	49·7	39·3	44·7	+ 7·1	30	8	6	1·35	+ 0·65	*	*	*	*
	Dungeness	51	43	50·3	45·3	47·9	+ 8·3	41	0	7	0·76	+ 0·32	3·4	—	6	—
	Hastings (St. Leonards)	52	41	50·1	44·0	47·2	+ 7·6	36	0	6	1·22	+ 0·59	2·3	− 10·4	4	− 19
	Southampton	54	36	51·5	43·6	47·7	+ 7·9	40	0	7	1·13	+ 0·43	7·9	− 3·5	14	− 6
	Portland Bill	52	43	50·6	45·1	48·0	+ 6·4	42	0	7	1·17	—	*	*	*	*
	Shaftesbury Ⓜ	—	—	—	—	—	—	—	—	7	1·23	+ 0·53	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	48	29	42·3	33·0	37·8	− 2·4	1	33	6	1·15	− 0·79	*	*	*	*
	Glasgow	45	30	40·7	34·4	37·7	− 0·7	0	30	6	2·50	+ 1·61	2·0	− 2·7	4	− 6
	Cally Ⓢ	50	27	42·7	34·6	38·8	+ 0·4	2	27	6	3·06	+ 1·95	*	*	*	*
	Douglas (Isle of Man)	50	32	46·1	36·1	41·3	+ 0·6	11	25	6	2·44	+ 1·44	6·9	− 3·6	13	− 7
7. ENGLAND N.W.	Newton Reigny	48	28	43·6	33·3	38·7	+ 2·5	4	33	6	2·43	—	4·3	—	8	—
	Stonyhurst	50	33	45·0	35·9	40·6	+ 2·9	8	25	7	1·87	+ 0·89	5·2	− 1·9	10	− 4
	Blackpool Ⓜ	51	32	47·9	38·1	43·2	+ 4·6	25	11	6	1·37	+ 0·70	7·2	− 0·2	14	0
	Manchester (Prestwich)	52	32	47·8	36·5	42·4	+ 4·5	26	15	7	1·35	+ 0·60	0·1	—	0	—
	Liverpool Obsy. (Bidston)	53	33	47·6	38·4	43·2	+ 3·7	24	10	7	1·22	+ 0·78	9·4	—	18	—
	Chester (Hawarden Bridge)	55	34	50·4	38·6	44·7	+ 4·7	33	10	7	1·26	—	*	*	*	*
	Llandudno Ⓜ	53	34	49·3	38·0	43·9	+ 2·3	30	11	7	2·13	+ 1·48	4·6	− 4·9	9	− 9
	Holyhead	51	34	48·0	39·0	43·7	+ 1·4	25	8	7	1·46	+ 0·69	*	*	*	*
8. ENGLAND, S.W.	Llandovery	57	33	51·3	? 37·7	? 44·8	+ 6·6	38	12	7	3·26	+ 2·08	*	*	*	*
	Pembroke	52	39	50·9	43·7	47·4	+ 4·6	38	0	7	2·05	+ 1·18	2·6	− 8·8	5	− 16
	Clifton	54	36	50·6	41·6	46·3	+ 6·7	32	1	7	1·95	+ 1·18	*	*	*	*
	Bath	56	32	51·7	39·7	45·9	+ 6·1	37	6	5	1·40	+ 0·73	9·5	—	17	—
	Arlington (N. Devon)	53	34	49·6	39·7	44·9	+ 5·0	30	6	7	3·10	+ 1·98	*	*	*	*
	Cullompton Ⓜ	55	30	51·2	39·5	45·6	+ 6·0	36	7	6	1·82	+ 1·03	9·4	+ 0·1	17	0
	Falmouth	54	38	51·5	44·9	48·3	+ 4·7	44	0	7	2·40	+ 1·21	8·9	− 3·7	16	− 7
	Plymouth	55	37	52·2	44·9	48·7	+ 6·6	47	0	7	2·12	+ 1·22	8·3	− 2·7	15	− 5
9 IRELAND, N.	Malin Head	46	33	42·7	36·6	39·8	− 1·6	2	20	7	2·87	+ 2·26	*	*	*	*
	Edenfel (Omagh)	47	24	40·3	31·7	36·2	− 1·4	0	41	5	2·49	+ 1·69	*	*	*	*
	Blacksod Point	49	30	44·9	35·7	40·5	− 2·2	8	25	6	1·20	+ 0·01	*	*	*	*
	Markree Castle	50	26	42·5	32·3	37·6	− 1·8	1	36	6	1·96	+ 1·09	3·1	− 5·7	6	− 11
	Armagh	50	28	43·0	32·5	38·0	− 0·7	3	36	5	2·03	+ 2·30	7·6	− 2·2	15	− 4
	Donaghadee	55	28	46·9	33·9	40·7	0·0	14	34	7	2·82	+ 2·18	*	*	*	*
10. IRELAND, S.	Dublin	52	30	46·7	36·5	41·8	+ 0·2	13	24	7	1·83	+ 1·30	3·6	− 9·1	7	− 17
	Parsonstown	50	25	44·9	33·3	39·3	− 0·3	8	34	7	2·05	+ 1·38	4·4	− 6·8	8	− 13
	Kilkenny	52	26	47·0	35·3	41·4	+ 0·6	14	29	6	2·22	+ 1·47	*	*	*	*
	Waterford	52	34	48·1	39·7	44·1	+ 2·3	24	6	7	2·06	+ 1·07	*	*	*	*
	Roche's Point	52	36	49·1	41·1	45·3	+ 1·8	27	3	7	2·31	+ 1·14	*	*	*	*
	Valencia	53	34	49·1	40·6	45·0	+ 0·2	27	4	7	2·29	+ 0·89	2·5	− 9·0	5	− 17
	Killarney	52	27	48·7	36·8	43·0	− 0·2	29	15	7	2·63	+ 1·16	*	*	*	*
	Foynes	50	29	45·2	36·3	40·9	− 0·7	9	23	7	2·34	+ 1·48	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	45	52·9	46·7	49·9	+ 3·6	55	0	7	1·82	+ 0·97	10·7	− 2·2	19	− 4
	Jersey	55	46	52·6	47·6	50·2	+ 7·5	57	0	6	0·92	+ 0·17	3·8	− 11·0	7	− 19

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

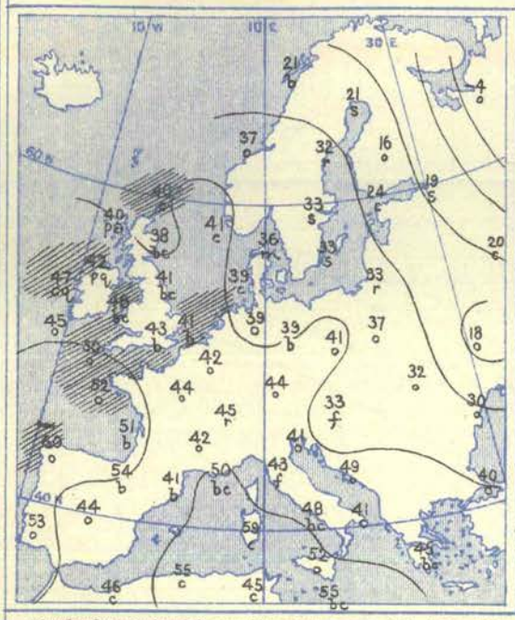
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

For additional Reports of Sunshine, see last page.

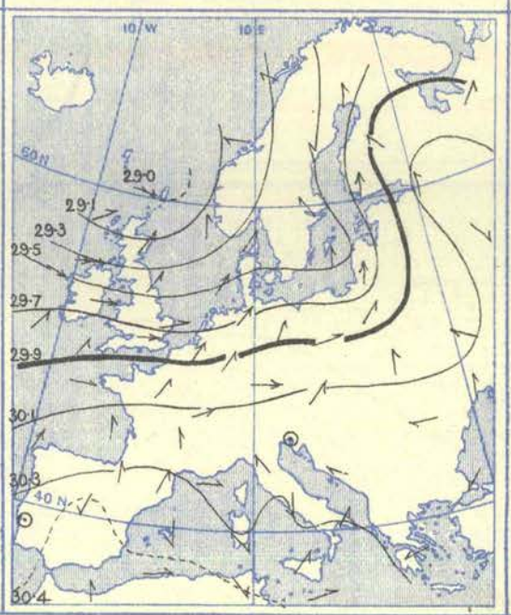
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 4th January, 1903.

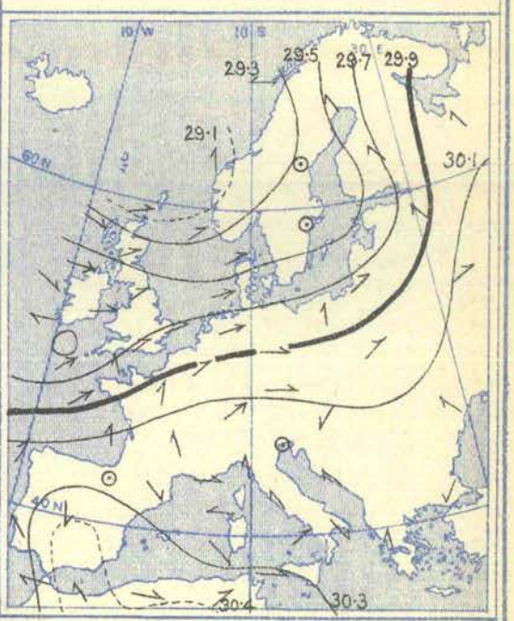
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair over the greater part of the United Kingdom, but dull in the south of Ireland, and showery on our extreme north-west coasts. Cloudy or dull at most of the Continental stations, with rain at Memel, Cracow, Munich, and Limoges, and snow in Sweden, as well as at St. Petersburg; fine in the south of France. Heavy rain falling later over the southern parts of Great Britain and the north of France, the amount measured next morning exceeding an inch at Pembroke, Scilly, and Cherbourg.

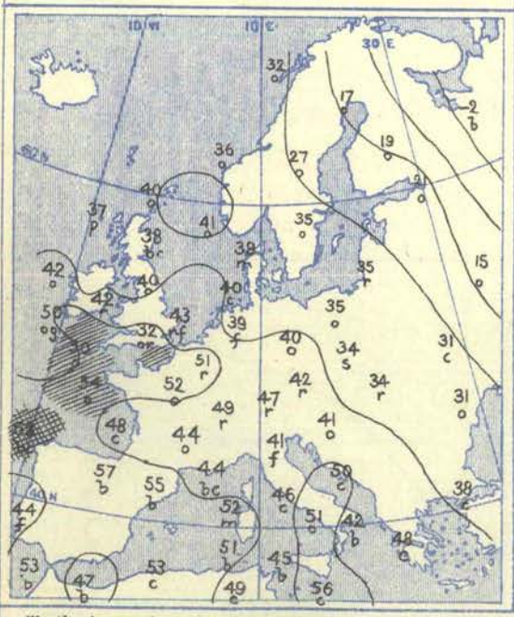
Temperature fallen over England and France, and also over the central and southern parts of Russia. Morning readings highest, 60° at Corunna, 59° at Bilbao and Cagliari, and 57° at Alicante; above 50° at most of the Mediterranean and Spanish coast stations, and also in the west of France. Lowest, −4° at Archangel, +16° at Kuopio, and 18° at Kiev; below the freezing point over Russia and the northern parts of Scandinavia generally. Rising during day to 50°, and upwards, at several of our own southern stations, and to 55° at Scilly, exceeding 60° in many parts of Spain, Italy, and the extreme south of France, the highest readings reported being 67° at Palermo, and 66° at Bilbao and Corunna.

Wind Westerly or South-Westerly over western and central Europe generally, and strong to a gale in force on many parts of our own north-west coasts; Southerly or South-Easterly over Finland, Sweden, and the Baltic; Easterly in the west of Norway. Light and variable over southern Europe. Cyclonic circulation appearing later over the south-west of our Islands; no important change occurring elsewhere.

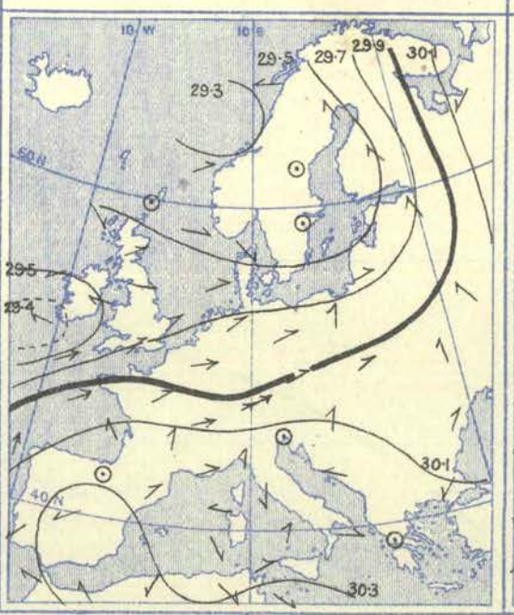
Barometer highest, 30·4 ins. and upwards over Algeria and the central and southern parts of Spain; 30·2 ins. and upwards in an anticyclone covering the whole of southern Europe; 30·1 ins. and upwards over central Russia. Lowest, 29·0 ins. and less in a cyclonic area, with its centre a little to the north-eastward of the Shetlands, latter system subsequently moving away to the northward, but new disturbance advancing to the north of the St. George's Channel, and barometer falling briskly on our south-west coasts.

Monday, 5th January, 1903.

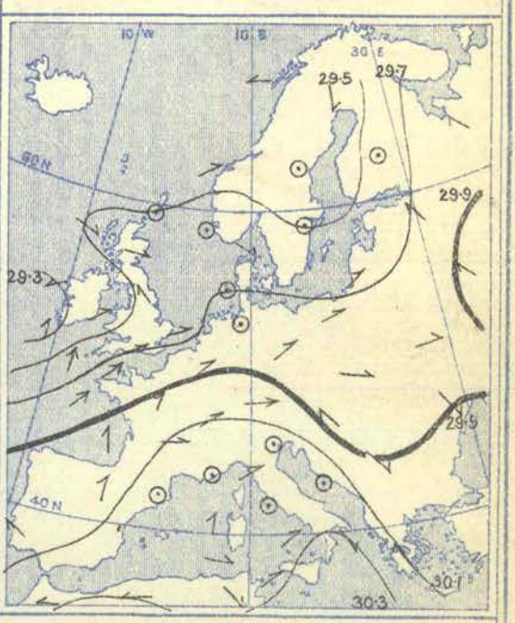
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning very rainy over the central and southern parts of the United Kingdom, but fair or fine in the north. Cloudy or dull over the greater part of the Continent, with fog in a few isolated places, and with rain over Belgium, South Germany, and the east of France. Snow falling at several of the Russian stations; fine over the Spanish Peninsula and the extreme southern parts of France and Italy. Rain falling later over north-western and central Europe generally, and snow in several parts of Sweden and northern Russia.

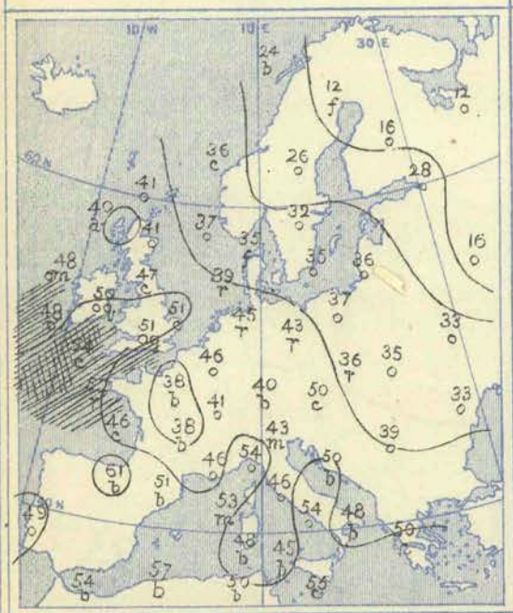
Temperature risen over England and the neighbouring parts of the Continent; changed irregularly elsewhere. Morning readings highest, 58° at Bilbao, 57° at Biarritz, and 56° at Malta; above 50° at most of the Mediterranean and Spanish coast stations, and also on our own southern coasts. Lowest, −2° at Archangel, +15 at Moscow, 17° at Uleaborg, and 19° at Kuopio; below the freezing point in most parts of Russia and Scandinavia. Rising during day to 50° and upwards over nearly the whole of Ireland and England, and to 56° at Scilly. Exceeding 60° over Spain and the extreme southern parts of France and Italy, and reaching 66° at Palermo.

Wind strong from the South-Westward over the southern parts of Great Britain and the north of France, and moderate from the same quarter over the Netherlands, Denmark, and Germany; Easterly at most of the Irish stations. Light from the Westward over Scotland and the west of Norway; calm in Sweden; light from the Southward or South-Eastward over the greater part of Russia. Light and variable over southern Europe generally. Subsequently shifting to the Southward or South-Westward in the south of Ireland; no important change occurring elsewhere.

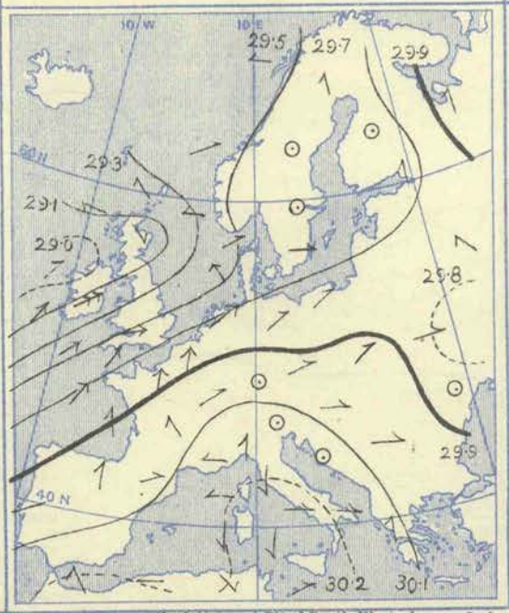
Barometer highest, 30·3 ins. and upwards over Algeria and the central and southern parts of Spain; 30·1 ins. and upwards in an anticyclone covering the whole of southern Europe, and also in another system over Russia. Lowest, 29·3 ins. and less in a shallow cyclonic area off the west of Norway; 29·4 ins. and less in a deeper disturbance with its centre off the south-west of Ireland. Latter disturbance spreading eastwards later, and barometer falling over the whole of Ireland and England.

Tuesday, 6th January, 1903.

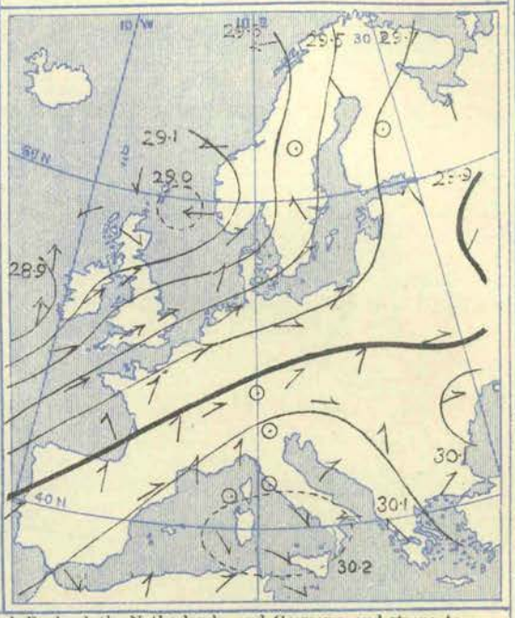
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning rainy over the northern parts of Great Britain, but temporarily fair at some of our eastern and southern stations. Fine over the central parts of France and also over southern Italy, but cloudy or dull over the Continent as a whole, with fog in Denmark and the south of Scandinavia; rain falling in several parts of Germany and also in the south of Denmark, and snow at Hangö. Rain falling later over north-western Europe generally, and snow in Sweden and Finland; amount of rain very large (2·1 ins.) at Lisbon.

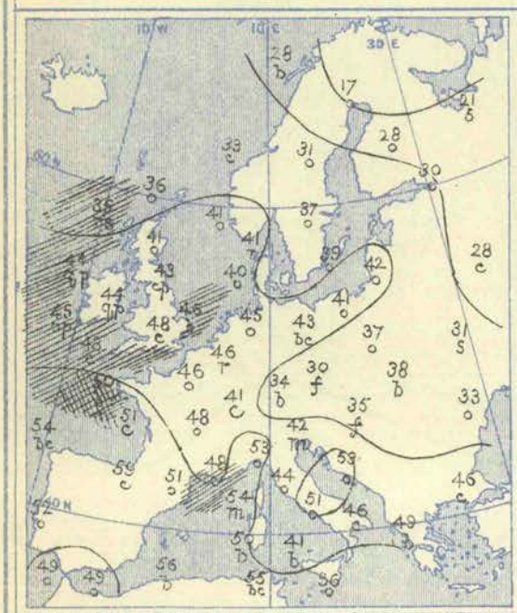
Temperature risen in most parts of the United Kingdom, and also over Germany, Austria, and southern Europe generally; fallen elsewhere. Morning readings highest, 61° at Biarritz, 57° at Algiers, and 55° at Bilbao and Malta; slightly above 50° at several of our own southern stations. Lowest, 12° at Archangel and Haparanda, 16° at Kuopio and Moscow, and 17° at Uleaborg; below the freezing point over Scandinavia and northern Russia generally, and very little above it over central Scotland. Rising during day to 50° and upwards in most parts of Ireland and England, and to 55° at Donaghadee; exceeding 60° in many parts of southern Europe, and reaching 64° at Bilbao, Palermo, and Malta.

Wind South-Westerly over Ireland, England, the Netherlands, and Germany, and strong to a gale in force over the Irish Sea and the St. George's Channel; Easterly or South-Easterly over Norway and Scotland. Calm over central Sweden; light from the Southward over the northern parts of Russia. Light and variable over southern Europe generally. Subsequently increasing to a strong breeze from the South-Westward over the south of England and the north of France; no important change occurring elsewhere.

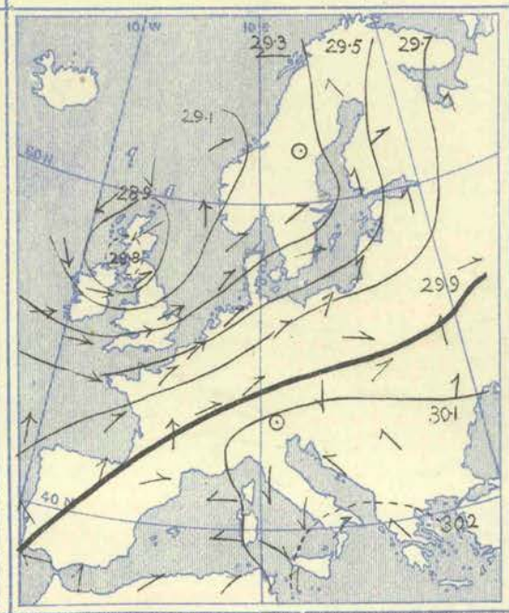
Barometer highest, 30·2 ins. and upwards to 30·1 ins. in an anticyclone covering nearly the whole of Italy, Algeria, and the western and central parts of the Mediterranean; 29·9 ins. and upwards over northern Russia. Lowest, 29·0 ins. and less in a rather deep cyclonic system with its centre off the north-west of Ireland. Secondary depression subsequently forming off the east of Scotland and moving north-eastwards. New and deep disturbance approaching the west of Ireland at night.

Wednesday, 7th January, 1903.

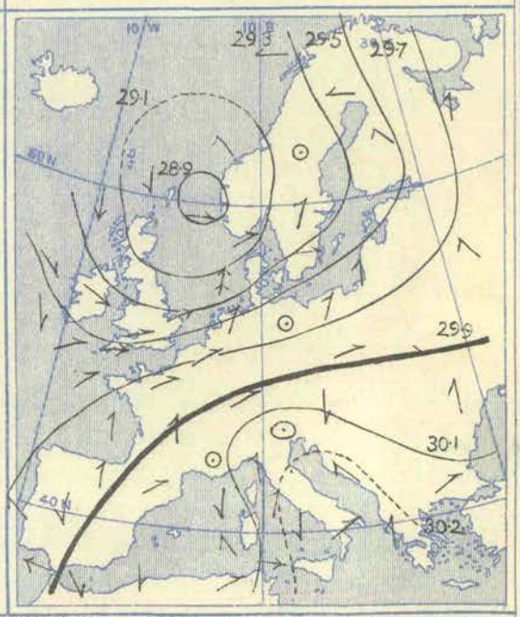
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning temporarily fine over the eastern and central parts of England, as well as at many of the German stations, but cloudy and unsettled over Europe as a whole; rain or sleet falling over the northern parts of Great Britain, and passing showers at several of our western stations. Fog reported in several parts of Austria and northern Italy, and snow at Kiev. Rain falling during day over north-western Europe generally, and snow in several parts of Sweden and northern Russia.

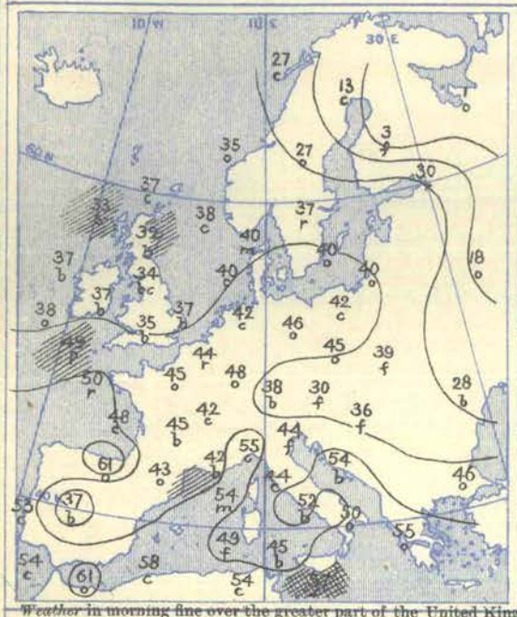
Temperature fallen over England and Ireland, and also over Austria, Italy, and south Germany, risen over central France, and over northern Europe generally. Morning readings highest, 59° at Biarritz, 58° at Bilbao, and 56° at Malta and Algiers; above 50° in the west of France, and very little below it at the English Channel stations. Lowest, 17° at Haparanda, 21° at Archangel, and 22° at Uleaborg; below the freezing point in some parts of Austria. Rising during day to 50°, or slightly above it at most of our own southern stations; exceeding 60° in several parts of southern Europe, and reaching 66° at Palermo.

Wind strong from the Westward or North-Westward in Ireland, and from the South-Westward over England and the neighbouring parts of the Continent; light from the South-Westward in Denmark and Germany, and from the Southward over northern Russia; moderate to strong from the Northward or North-Eastward in Scotland. Variable over the greater part of southern Europe, but South-Easterly in Portugal. Subsequently increasing from the South-Westward in Denmark, and blowing a gale at Fanö; shifting to the North-Westward in the east of Scotland.

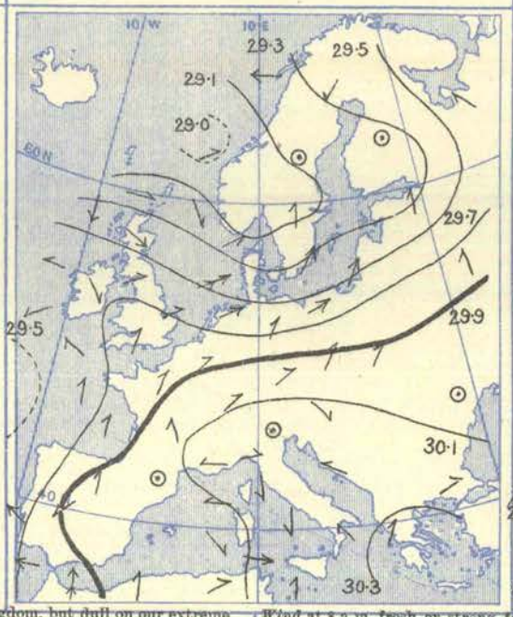
Barometer highest, 30·2 ins., and upwards, to 30·1 ins. in an anticyclone lying over the whole of south-eastern Europe, Italy, and the eastern and central parts of the Mediterranean. Lowest, 28·8 ins. and less in a well-marked and rather deep cyclonic disturbance, with its centre over the south of Scotland. Cyclonic system subsequently travelling north-eastwards across the North Sea, and barometer rising in all parts of the United Kingdom.

Thursday, January 8th, 1903.

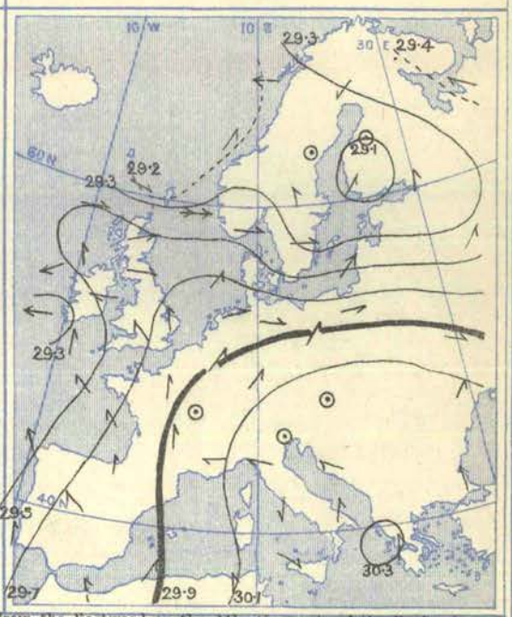
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the greater part of the United Kingdom, but dull on our extreme south-west coasts, with passing showers at Scilly. Cloudy or dull in most of the Continental countries, with fog in Austria, and rain in several parts of Sweden and northern Russia, as well as at Brest and Brussels; fine in Spain and the south of France. Rain falling later over nearly the whole of England, and snow in Ireland and Scotland—amounts large at all our south-western stations. Lightning seen at Blacksod Point during the night.

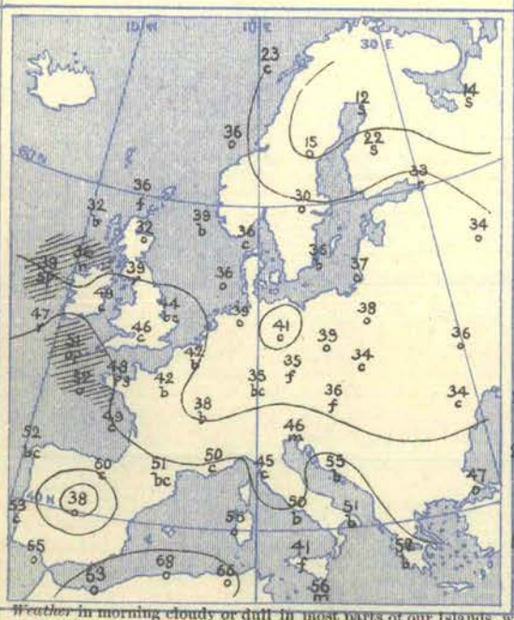
Temperature fallen decidedly over our Islands, and to a less extent in France and the Netherlands. Morning readings highest, 61° at Biarritz and Nemours, 58° at Algiers, and 57° at Oran and Malta; above 50° at most of the Mediterranean and Spanish coast stations, and very little below that point on our own southern coasts. Lowest, 1° at Archangel, 13° at Haparanda, 18° at Moscow, and 27° at Kharkov; below the freezing point in several parts of Ireland, Scotland, and the north of England. Daily maxima below 35° over eastern and central Scotland, and below 40° over the northern parts of the United Kingdom generally. Thermometer rising to 50° or more on the south-west coasts of England; exceeding 60° in several parts of southern Europe, and reaching 66° at Palermo.

Wind at 8 a.m. fresh or strong from the Eastward on the Atlantic coasts of the Peninsula, moderate from the Southward, over the Bay of Biscay, and from South-East or East on our south-west coasts. Fresh or strong from between North and West in Scotland, mainly Westerly to the eastward of the North Sea, and over Germany (a gale at Fanö); drawing into South-West and South over the Baltic and Gulf of Bothnia, and into East at Bodö. Light and variable over southern and south-eastern Europe, and strong to a gale from South over Algeria. South-Easterly and Easterly winds increasing in force on our south-west coasts later, Westerly gale setting in at Skudesnaes, and South-Westerly gale over the Baltic.

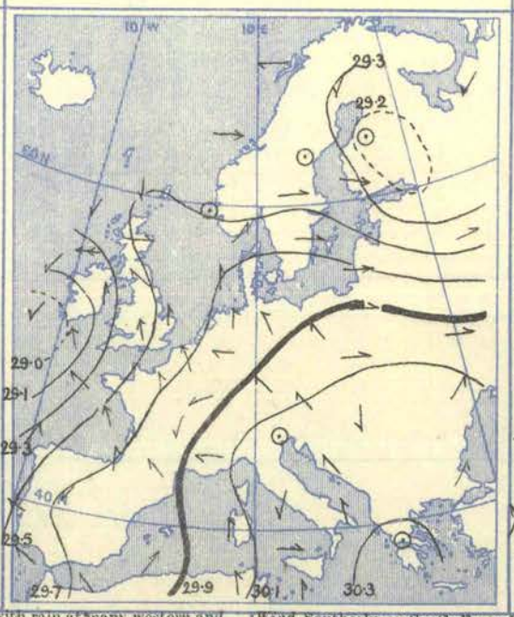
Barometer at 8 a.m. ranging from 30·3 ins. in Greece to less than 29·6 ins. over Portugal and our south-western coasts, and to nearly 29·0 ins. over the central parts of Scandinavia. A rather deep depression advancing towards Ireland later from the South-Westward, and barometer falling briskly over our south-western districts. Scandinavian low-pressure area moving quickly eastwards to Finland, and mercury rising decidedly in its rear. Very little change over the central and southern regions of the Continent.

Friday, January 9th, 1903.

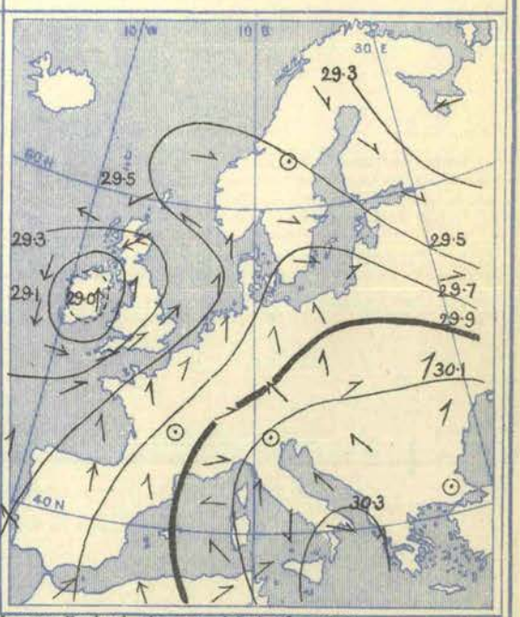
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull in most parts of our Islands, with rain at many western and northern stations and snow showers at Blacksod Point. Fine over the Netherlands, France, Italy, and western and southern Germany; cloudy over Spain and the northern and central parts of the Continent generally, with fog in Austria, rain at Swinemünde and St. Petersburg, and snow in the extreme north of Russia. Heavy falls of rain and snow occurring later over the northern parts of the United Kingdom (as much as 2·0 ins. at Malin Head, 1·4 in. at Leith, and 1·3 in. at Aberdeen), and smaller quantities of rain in most other parts of western Europe.

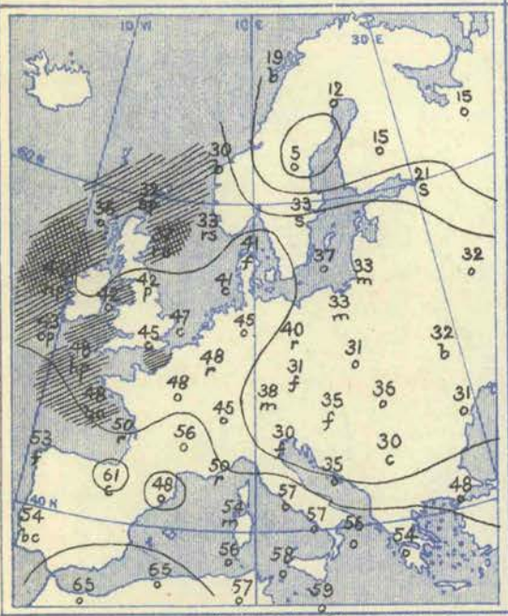
Temperature risen in our Islands and also in the south of France, fallen in most other localities. Morning readings highest, 68° at Algiers, 66° at La Calle, 63° at Nemours, and 60° at Biarritz; above 50° in the Scilly Islands and on the north-west coasts of France. Lowest, 12° at Uleaborg, 13° at Haparanda, 14° at Archangel, and 15° at Hernösand; below the freezing point over the northern parts of Russia and Scandinavia generally, and also over central Scotland. Remaining below 40° all day in the north of Scotland, but rising to 50° and upwards in the central and southern parts of the United Kingdom.

Wind Southerly or South-Easterly over England, the east of Ireland, and the western and central parts of the Continent generally, and strong in force at the mouth of the Channel; light from the Eastward or North-Eastward in Scotland, and strong to a gale from the same quarters on the north and north-west coasts of Ireland. Westerly or South-Westerly over the greater part of Russia and Scandinavia, but Easterly or North-Easterly in the extreme northern parts of those countries. Subsequently increasing to a gale from the Eastward or North-Eastward in Scotland; veering to the South-Westward over the English Channel and the north of France.

Barometer highest, 30·3 ins. and upwards in Greece; 30·1 ins. and upwards over Italy and south-eastern Europe generally. Lowest, 29·0 ins. and less in a rather deep cyclonic system with its centre lying some little distance to the southward of Ireland; 29·2 ins. and less in a shallower disturbance over Finland. Both depressions moving north-eastwards later; barometer falling briskly in the northern parts of these Islands, but rising again on our south-west coasts.

Saturday, 10th January, 1903.

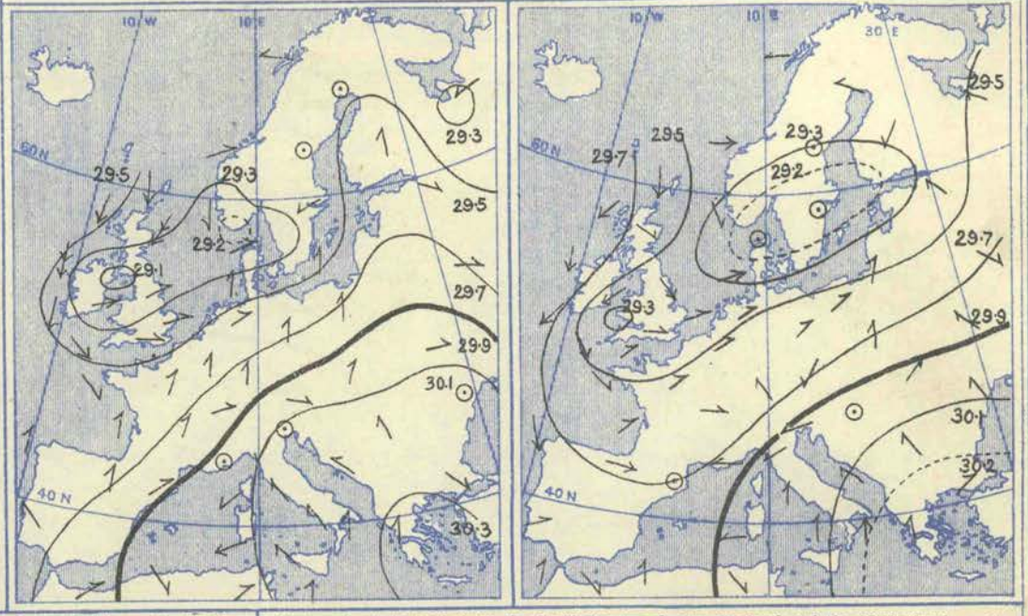
Temperature and Weather. 8 a.m.



Weather fine over central and southern England, but cloudy and unsettled in nearly all other parts of Europe, with rain and sleet in Scotland and the north of Ireland, and passing showers in most other parts of our western and northern districts. Rain falling in the west of France and at Brussels and Berlin, and snow in the south of Scandinavia, as well as at St. Petersburg; fog reported over Austria and south Germany. Rain, sleet, or snow falling later over western, northern, and central Europe generally.

Temperature fallen over England and the south of Ireland, as well as in Scandinavia, Russia, and Austria; fallen in most other countries. Morning readings highest, 65° at Nemours and Algiers, 64° at Oran, and 61° at Biarritz; above 55° in many parts of southern Europe. Lowest, 5° at Hernösand, 12° at Haparanda, and 14° at Uleaborg; below the freezing point in most parts of Russia and Scandinavia, and very little above it in the north of Scotland. Remaining below 40° all day in Scotland, but exceeding 45° in the southern parts of the United Kingdom; exceeding 60° in many parts of southern Europe.

Barometer and Wind. 8 a.m. 6 p.m.



Wind moderate to fresh from the South-Westward over England and the Netherlands, and light from the same quarter or from South over France, Germany, Denmark, and the Baltic; strong to a gale from the North-Eastward in Scotland, and from the Northward in Ireland. Northerly in the south of Norway; calm in the Gulf of Bothnia; light from the Southward or South-Eastward over the greater part of southern Europe. Moderating later in Scotland, but increasing to a slight gale from the Northward on the west coasts of Great Britain.

Barometer highest, 30·3 ins. and upwards in Greece; 30·1 ins. and upwards in an anticyclone covering the whole of south-eastern Europe. Lowest, 29·1 ins. and less in a rather deep cyclonic system, with its centre over the Isle of Man; 29·2 ins. and less in a shallow secondary off the south of Norway; 29·3 ins. and less in another disturbance over the extreme north of Russia. Depression over Isle of Man subsequently moving southwards across Wales; secondary disturbance travelling eastwards across the south of Sweden, and increasing in size and intensity.

IV.—GENERAL NOTES, etc.

During the earlier part of the week a large anticyclone lay over southern Europe, while cyclonic systems travelled north-eastwards across our Islands, the North Sea, and Scandinavia. The weather in the western and northern countries was consequently very unsettled, with heavy rain in many parts of the United Kingdom, and snow at several of the Russian and Scandinavian stations. On our own southern coasts the wind, which was chiefly from the Westward or South-Westward, was often strong to a gale in force. In the southern parts of the Continent the weather, under the influence of the high-pressure system, was mostly fair and dry, with a rather high temperature for the time of year.

Towards the close of the period, a cyclonic disturbance of greater depth than those hitherto experienced advanced north-eastwards across Ireland to the Irish Sea, and caused strong North-Easterly gales in all our northern districts, with very heavy falls of snow and rain. On Saturday, however, the system changed its course, and moved Southwards across Wales and the south-west of England, the wind in its rear shifting to the Northward or North-Eastward, with a decided fall of temperature.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the reading at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Belgium, and Holland; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. n France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; at 9.25 a.m. in Spain, and 9 36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands; 4.36 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.25 p.m. in Spain; 6.51 p.m. in Algeria 6·59 p.m. in Russia; 7 p.m. in Germany, Denmark, Norway, and Sweden; 8 p.m. in Austria and Italy, and 9 p.m. in Holland and Belgium. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 2.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week
DEERNESS	0·7	- 4·9	2	- 11	SHEFFIELD	3·4	—	7	—	WESTBOURNE	6·4†	- 5·2	11†	- 9
STRATHPEFFER SPA	4·6	- 2·2	10	- 5	WORKSOP	5·0	- 2·4	10	- 5	VENTNOR HOSPITAL	3·6	- 7·1	6	- 13
EDINBURGH	0.5	- 5·9	1	- 12	THURCASTON	8·6	+ 0·4	16	+ 1	BOURNEMOUTH	—	—	—	—
COCKLE PARK	8·8	—	18	—	MARGATE	3·4	- 6·6	6	- 12	SOUTHPORT	4·7	—	9	—
NEWCASTLE-ON-TYNE	5 8	—	11	—	BROADSTAIRS	5·9	—	11	—	RHYL	3·7	—	7	—
YORK	8·4	+ 2·1	16	+ 4	EASTBOURNE	1·5	- 10·7	3	- 19	COLWYN BAY	—	—	—	—
CROMER	15·7	—	30	—	BRIGHTON	2·2	- 8·8	4	- 16	ABERDOVEY	0·9†	—	2†	—
LOWESTOFT	9·2	—	17	—	WORTHING	2·9	—	5	—	TENBY	3·7	- 8·3	7	- 15
HOLLESLEY BAY	12·6	—	23	—	BOGNOR	6·2†	—	11†	—	TORQUAY	9·7	- 2·8	17	- 5
DUNMOW	7·1	—	13	—	WATERGATE PARK	5·7	—	10	—	NEWQUAY	7·2	- 4·2	13	- 8
										GUERNSEY	1·7†	- 9·5	3†	- 17

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 2.] *Fourth Series.* WEEK ENDING SATURDAY, JANUARY 17TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 8.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	46	6	36·1	26·5	31·5	6 below	0	− 6	74	+37	0	− 12	118	+ 45
	1. SCOTLAND, EAST	40	1	34·2	22·9	28·8	8 below	0	− 7	92	+49	0	− 14	137	+ 52
	2. ENGLAND, N.E.	40	14	35·2	26·9	31·2	6 below	0	− 7	76	+38	11	− 3	101	+ 26
	3. ENGLAND, EAST	41	16	35·0	26·9	31·1	6 below	0	− 7	76	+34	29	+ 14	82	− 1
	4. MIDLAND COUNTIES	40	13	32·6	22·9	28·0	10 below	0	− 9	98	+54	27	+ 9	111	+ 25
	5. ENGLAND, SOUTH	44	17	35·1	27·6	31·5	8 below	0	−11	74	+40	35	+ 12	74	+ 8
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	42	18	35·1	26·2	30·8	9 below	0	−10	78	+47	3	− 18	106	+ 45
	7. ENGLAND, N.W.	44	12	34·7	25·5	30·3	9 below	0	− 9	82	+51	24	+ 5	95	+ 35
	8. ENGLAND, S.W.	47	19	36·3	28·1	32·4	9 below	0	−15	67	+43	34	+ 3	68	+ 21
	9. IRELAND, NORTH	45	16	36·7	28·5	32·8	7 below	0	−13	64	+37	4	− 22	95	+ 42
	10. IRELAND, SOUTH	49	20	39·8	30·8	35·5	7 below	0	−20	46	+25	23	− 18	59	+ 18
	— CHANNEL ISLANDS	50	26	41·5	33·4	37·6	7 below	0	−23	31	+20	57	+ 10	31	+ 10

Rainfall.

	DISTRICTS. (See p. 8.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	1	12 less	7	− 3	1·2	− 1·4
	1. SCOTLAND, EAST	1	less than half	6 less	7	− 1	1·9	+ 0·6
	2. ENGLAND, N.E.	3	3	1 less	9	+ 2	1·7	+ 0·8
	3. ENGLAND, EAST	2	1	3 less	6	− 2	0·7	− 0·2
	4. MIDLAND COUNTIES	1	1	4 less	7	0	1·3	+ 0·2
	5. ENGLAND, SOUTH	2	2	4 less	8	0	1·3	+ 0·1
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	1	less than half	12 less	7	− 2	2·3	− 0·1
	7. ENGLAND, N.W.	1	less than half	7 less	8	0	1·7	+ 0·3
	8. ENGLAND, S.W.	1	2	7 less	8	− 1	2·5	+ 0·7
	9. IRELAND, NORTH	2	4	4 less	8	− 2	2·8	+ 1·3
	10. IRELAND, SOUTH	3	8	2 less	10	+ 1	3·0	+ 1·1
	— CHANNEL ISLANDS	4	6	2 less	11	+ 2	2·0	+ 0·4

Bright Sunshine.

	DISTRICTS. (See p. 8.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	13	+ 8	28	+16	16	+ 5	17	+ 5
	1. SCOTLAND, EAST	7	− 3	13	− 5	12	− 6	12	− 6
	2. ENGLAND, N.E.	10	+ 1	18	+ 2	18	+ 2	17	+ 2
	3. ENGLAND, EAST	20	+10	36	+17	31	+ 10	28	+ 9
	4. MIDLAND COUNTIES	21	+14	39	+25	28	+ 13	26	+12
	5. ENGLAND, SOUTH	21	+ 9	37	+16	25	+ 4	22	+ 3
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	− 2	12	− 4	11	− 5	11	− 5
	7. ENGLAND, N.W.	22	+13	41	+24	27	+ 11	25	+10
	8. ENGLAND, S.W.	15	+ 6	27	+11	23	+ 3	20	+ 2
	9. IRELAND, NORTH	16	+ 7	31	+12	21	+ 2	20	+ 2
	10. IRELAND, SOUTH	16	+ 4	28	+ 6	20	− 4	18	− 4
	— CHANNEL ISLANDS	17	+ 4	29	+ 7	22	− 4	19	− 4

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period was very cold and wintry. Snow fell in many places during the first day or two, but the conditions subsequently became dry generally until Friday or Saturday. On the former day rain was experienced over the south-western parts of the Kingdom, heavily in the south of Ireland, and on the latter sleet or cold rain fell over the western, central, and southern parts of England. Thunder was heard at Fort William both on Wednesday and Friday, and there was a "silver thaw" in London on Saturday evening.

Temperature was as much as 10° below the normal in the Midland Counties, 9° in Scotland W. and the western half of England, and between 8° and 6° in other parts of the Kingdom. The highest of the maxima were recorded, as a general rule, towards the end of the period, and ranged from 50° in the Channel Islands, and 49° in Ireland S., to 40° in Scotland E., England N.E., and the Midland Counties. At inland stations the daily maxima during the week were frequently below 32°, and at Lairg, on Tuesday, the highest reading was no more than 20°. The lowest of the minima were mostly recorded about the middle of the week. In Scotland N. (at Braemar on the 13th) the screened thermometer registered a minimum of 1°, and on the following day that at Lairg, Scotland N., fell to 6°. Elsewhere, however, the minima ranged from 12° in England N.W., and 13° in the Midland Counties, to 20° in Ireland S., and 26° in the Channel Islands.

Rainfall was less than the mean, and in some districts the fall was scarcely appreciable.

Bright Sunshine exceeded the mean generally, but was deficient in Scotland E. and W. The percentage of the possible duration ranged from 41 in England N.W., 39 in the Midland Counties, and 37 in England S., to 13 in Scotland E., and to 12 in Scotland W.

Barometer and Wind.—At the beginning of the week a depression which had previously travelled north-eastwards to the Irish Sea had recurved, and moved south-south-eastwards to the Channel Islands, while the eastern side of an anticyclone was spreading over our north-west districts from the Atlantic. During the remainder of the week the latter was the dominant system over north-western and northern Europe. Its centre moved eastwards across the northern part of the North Sea, and finally north-eastwards to Scandinavia and the Gulf of Bothnia, while at the same time it increased in intensity. The wind, which was at first moderate to strong from the Northward or North-Eastward, soon moderated, and became Easterly or South-Easterly in the south and south-west, and Southerly in the extreme north. Towards the end of the period cyclonic systems spread over the Kingdom from the Atlantic, and strong winds or gales from the Southward or South-Eastward were very prevalent along our western coasts, and also on the north-east coast of Scotland.

207 | 90 Wyman & S. Ltd.
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 7 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head Ⓢ	42	27	38·9	33·6	36·4	− 2·7	0	39	0	0·00	− 0·87	*	*	*	*
	Stornoway	46	25	40·1	30·0	35·3	− 3·4	0	47	4	0·38	− 0·72	7·8	+ 1·2	16	+ 3
	Wick Ⓢ	42	20	39·0	27·9	33·7	− 4·0	0	58	1	0·02	− 0·50	*	*	*	*
	Lairg Ⓢ	36	6	31·2	20·0	25·8	− 9·1	0	113	0	0·00	− 0·80	*	*	*	*
	Glencarron Ⓢ	42	15	35·1	22·4	29·0	− 8·2	0	91	0	0·00	− 2·25	*	*	*	*
	Fort Augustus Ⓢ	40	15	36·0	24·6	30·5	− 7·7	0	81	0	0·00	− 1·09	14·8	+ 11·4	30	+ 23
	Fort William	41	20	32·7	26·9	29·9	− 8·8	0	85	0	0·00	− 2·13	16·8	+ 11·4	33	+ 23
1. SCOTLAND E.	Nairn	39	16	35·4	24·3	30·1	− 7·3	0	83	0	0·00	− 0·44	*	*	*	*
	Aberdeen	40	19	36·1	27·3	31·9	− 5·7	0	71	1	0·01	− 0·51	5·7	− 5·7	12	− 11
	Braemar Ⓢ	35	1	30·2	17·0	23·9	−10·3	0	127	1	0·01	− 0·66	*	*	*	*
	Ochtertyre Ⓢ	36	13	33·4	21·1	27·5	− 9·3	0	102	1	0·02	− 1·04	*	*	*	*
	Leith	39	19	35·4	23·3	29·6	− 9·2	0	87	0	0·00	− 0·40	*	*	*	*
	Marchmont Ⓢ	36	20	34·6	24·1	29·6	− 6·8	0	87	0	0·00	− 0·60	11·8	+ 2·6	23	+ 5
2. ENGLAND, N.E.	Alnwick Castle	38	17	34·5	26·7	30·8	− 6·9	0	78	3	0·47	− 0·04	*	*	*	*
	Durham	34	14	32·5	22·5	27·7	− 9·1	0	100	3	0·42	− 0·02	5·2	− 5·1	10	− 10
	Shields	38	24	36·1	28·3	32·4	− 6·1	0	67	3	0·28	− 0·12	*	*	*	*
	Scarborough Ⓜ	39	25	37·8	30·8	34·4	− 4·0	0	53	5	0·26	− 0·21	10·7	—	20	—
	Spurn Head	40	32	37·6	33·0	35·4	− 2·8	0	46	2	0·18	− 0·14	*	*	*	*
	Fulbeck (Lincolnshire)	34	16	32·4	20·1	26·5	− 9·7	0	109	3	0·11	− 0·27	16·2	—	29	—
3. ENGLAND, E.	Hillington Ⓜ	39	16	35·2	23·3	29·5	− 7·3	0	88	3	0·14	− 0·32	17·9	+ 7·8	32	+ 14
	Yarmouth	40	31	36·1	32·3	34·3	− 3·0	0	54	2	0·04	− 0·40	*	*	*	*
	Geldeston	41	28	35·6	29·1	32·5	− 5·3	0	67	1	0·03	− 0·34	16·1	+ 4·5	29	+ 8
	Cambridge	37	17	35·4	21·4	28·7	− 8·7	0	93	2	0·22	− 0·12	21·2	+ 10·4	38	+ 19
	Felixstowe	40	29	34·8	31·0	33·0	− 5·2	0	63	2	0·14	—	19·8†	—	35†	—
	Rothamsted	35	20	32·7	24·1	28·6	− 8·4	0	94	2	0·17	− 0·37	25·0	+ 15·0	44	+ 27
4. MIDLAND COUNTIES	Harrogate	34	13	32·0	22·2	27·3	− 9·6	0	103	3	0·11	− 0·45	20·7	—	38	—
	Bawtry (Hesley Hall)	33	14	32·9	21·3	27·3	−10·0	0	103	2	0·05	− 0·35	*	*	*	*
	Loughborough	36	18	? 33·4	? 23·9	? 28·8	− 8·8	0	92	1?	0·09?	− 0·36	*	*	*	*
	Colly Weston (Stamford)	36	17	33·1	21·7	27·6	− 9·1	0	101	2	0·13	− 0·30	*	*	*	*
	Cheadle Ⓜ	36	21	32·2	24·3	28·4	− 8·1	0	95	1	0·05	— 0·55	*	*	*	*
	Birmingham (Edgbaston)	40	22	33·0	24·8	29·1	− 8·7	0	90	1	0·01	− 0·48	10·9	—	20	—
	Churchstoke Ⓜ	36	14	30·9	20·4	25·9	−11·7	0	113	1	0·08	− 0·55	24·7	+ 14·4	44	+ 24
	Hereford Ⓜ	36	16	32·5	22·6	27·8	−10·5	0	99	0	0·00	− 0·56	*	*	*	*
	Cirencester	36	19	32·2	23·1	27·8	− 9·7	0	99	1	0·17	− 0·47	25·2	+ 14·5	45	+ 26
	Oxford	38	21	34·1	25·0	29·7	− 8·6	0	86	1	0·13	− 0·33	24·5	+ 14·2	43	+ 25
5. ENGLAND, S.	London	37	24	34·7	27·6	31·3	− 7·4	0	75	1	0·35	− 0·08	9·5‡	+ 4·1‡	17‡	+ 7‡
	Swarraton (Alresford) Ⓜ	36	17	33·1	24·8	29·1	− 8·4	0	90	1	0·12	− 0·58	*	*	*	*
	Dungeness	41	25	35·9	29·1	32·6	− 6·7	0	66	3	0·19	− 0·23	16·6	—	29	—
	Hastings (St. Leonards)	43	24	35·0	28·0	31·6	− 7·9	0	73	3	0·40	− 0·22	24·7	+ 11·5	43	+ 20
	Southampton	44	21	36·8	27·5	32·3	− 7·4	0	68	1	0·16	− 0·53	25·4	+ 14·2	44	+ 25
	Portland Bill	43	26	37·6	29·9	33·9	− 7·6	0	57	2	0·20	—	*	*	*	*
	Shaftesbury Ⓜ	38	23	32·9	26·2	29·7	− 7·7	0	86	1	0·19	− 0·48	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	40	23	37·0	27·7	32·5	− 7·4	0	67	0	0·00	− 1·86	*	*	*	*
	Glasgow	35	18	32·2	24·1	28·3	−10·1	0	96	0	0·00	− 0·86	1·3	− 4·0	3	− 8
	Cally Ⓢ	39	20	33·0	24·0	28·7	− 9·5	0	93	1	0·02	− 1·05	*	*	*	*
	Douglas (Isle of Man)	42	23	38·0	28·8	33·6	− 7·0	0	59	1	0·02	− 0·95	11·2	0·0	21	0
7. ENGLAND N.W.	Newton Reigny	35	12	32·6	21·0	27·0	− 8·6	0	105	1	0·01	—	20·9	—	39	—
	Stonyhurst	36	23	32·9	26·1	29·6	− 8·0	0	87	0	0·00	− 0·93	21·3	+ 13·7	39	+ 25
	Blackpool Ⓜ	40	19	34·8	23·8	29·5	− 8·8	0	88	1	0·02	− 0·64	16·7	+ 8·7	31	+ 16
	Manchester (Prestwich)	43	23	35·5	25·9	30·9	− 7·0	0	78	0	0·00	− 0·71	16·2	—	30	—
	Liverpool Obsy. (Bidston)	34	25	33·0	27·3	30·3	− 9·1	0	82	0	0·00	− 0·51	21·9	—	40	—
	Chester (Hawarden Bridge)	44	20	36·3	24·3	30·5	− 9·2	0	81	1	0·02	—	*	*	*	*
	Llandudno Ⓜ	38	24	35·1	27·4	31·4	−10·0	0	74	1	0·01	− 0·62	26·5	+ 16·3	43	+ 30
	Holyhead	41	25	37·7	28·4	33·2	− 8·8	0	62	2	0·28	− 0·46	*	*	*	*
8. ENGLAND, S.W.	Llandovery												*	*	*	*
	Pembroke	44	28	38·7	30·6	34·8	− 7·7	0	50	2	0·23	− 0·61	22·2	+ 10·3	39	+ 18
	Clifton	38	21	33·6	25·8	29·9	− 9·7	0	85	1	0·21	− 0·54	*	*	*	*
	Bath	37	20	33·7	24·4	29·2	−10·7	0	90	1	0·17	− 0·48	24·7	—	44	—
	Arlington (N. Devon)	42	19	34·1	24·0	29·3	−10·7	0	89	0	0·00	− 1·03	*	*	*	*
	Cullompton Ⓜ	42	22	36·7	27·0	32·0	− 7·7	0	70	2	0·12	− 0·64	25·1	+ 15·4	44	+ 27
	Falmouth	47	29	39·6	33·5	36·7	− 6·7	0	37	2	0·62	− 0·54	11·4	− 1·3	20	− 2
	Plymouth	45	28	37·8	31·4	34·7	− 7·2	0	51	2	0·15	− 0·72	13·0	+ 1·7	22	+ 3
9 IRELAND, N.	Malin Head	38	28	35·7	30·3	33·1	− 8·3	0	62	2	0·10	− 0·46	*	*	*	*
	Edenfel (Omagh)	38	16	33·4	23·1	28·5	− 9·2	0	95	2	0·77	− 0·00	*	*	*	*
	Blacksod Point	45	29	39·3	31·6	35·6	− 7·0	0	45	2	0·25	− 0·85	*	*	*	*
	Markree Castle	41	19	36·1	26·5	31·5	− 7·9	0	74	2	0·42	− 0·42	13·9	+ 4·4	26	+ 8
	Armagh	40	20	36·1	27·1	31·8	− 6·9	0	71	3	0·59	− 0·03	18·8	+ 8·5	35	+ 16
	Donaghadee	45	27	39·4	32·3	36·0	− 4·5	0	42	2	0·03	− 0·60	*	*	*	*
10. IRELAND, S.	Dublin	43	26	37·9	31·0	34·6	− 7·1	0	52	3	0·32	− 0·18	16·5	+ 3·4	30	+ 6
	Parsonstown	44	20	37·4	26·9	32·4	− 7·2	0	67	2	0·30	− 0·35	15·8	+ 4·2	29	+ 8
	Kilkenny	44	20	37·3	27·1	32·4	− 8·4	0	67	2	0·79	+ 0·04	*	*	*	*
	Waterford	45	25	38·4	30·6	34·7	− 6·8	0	51	2	1·10	+ 0·13	*	*	*	*
	Roche's Point	48	28	42·7	34·7	38·9	− 4·5	2	27	3	1·07	− 0·08	*	*	*	*
	Valencia	49	28	43·3	35·4	39·5	− 5·1	4	25	4	1·50	+ 0·12	14·8	+ 2·8	26	+ 5
	Killarney	? 49	23	? 42·1	32·3	? 37·4	− 5·8	0	35	3	0·75	− 0·66	*	*	*	*
	Foynes	49	22	39·0	28·7	34·1	− 7·4	0	55	2	0·34	− 0·48	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	50	32	43·6	34·6	39·3	− 6·5	4	28	3	0·78	− 0·05	16·2	+ 3·0	28	+ 5
	Jersey	44	26	39·3	32·1	35·8	− 6·7	0	43	5	0·47	− 0·25	26·8	+ 11·6	45	+ 20

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

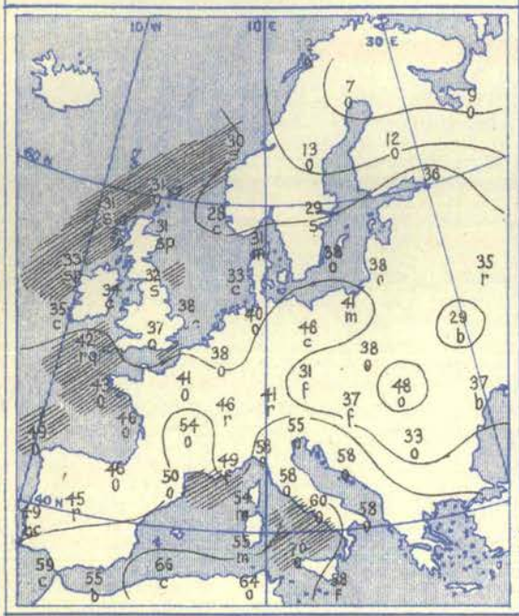
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

For additional Reports of Sunshine, see last page.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 11th January, 1903.

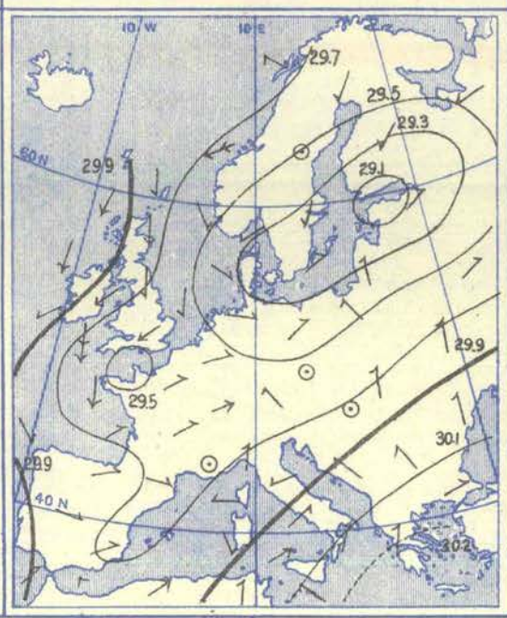
Temperature and Weather. 8 a.m.

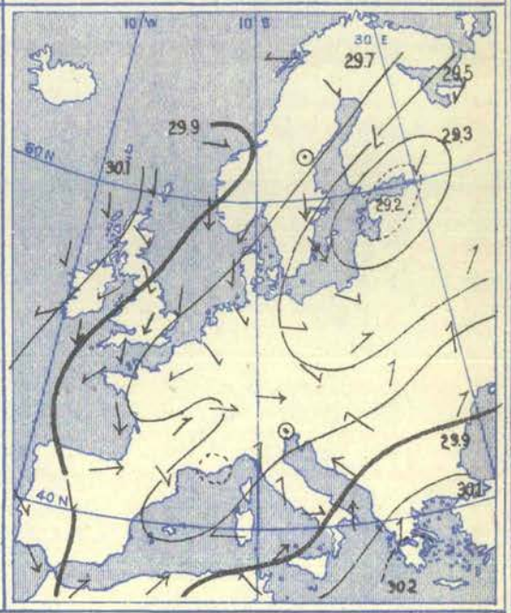


Weather at 8 a.m. fair in many parts of our Islands and in Portugal; cloudy or dull over Europe as a whole, with snow or sleet at some of our own stations, rain at Madrid, North Germany, and Copenhagen, snow at Christiansund, Karlstad, and Stockholm, and rain over the Gulf of Finland and at Moscow. Fog prevailing in the Riviera. Rain or snow falling later in most parts of France, central and northern Europe, and rain in Italy.

Temperature fallen decidedly over our Islands and their neighbourhood. Readings at 8 a.m. ranging from 70° at Palermo, 66° at Algiers, and 59° at San Fernando and Alicante, to 55° at Trieste; very little above 32° at most of our own stations, 24° at Karlstad, 12° at Kuopio and Bodö, 9° at Archangel, and to 7° at Haparanda. Rising later to 77° at Algiers, 74° at Palermo, 67° at Cagliari, and to 61° at Lésina and San Fernando. Remaining below 40° in nearly all parts of our Islands, and not exceeding 34° at Parsonstown. Severe frost continuing all day over northern Europe.

Barometer and Wind. 8 a.m. 6 p.m.



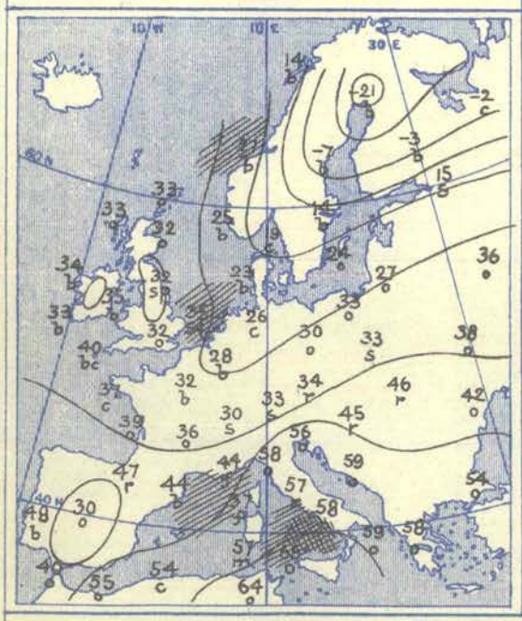


Wind at 8 a.m. showing two distinct cyclonic circulations—one around the Gulf of Finland and the Baltic, and the other around the English Channel. Light to moderate in force as a whole, but the Northerly and North-Easterly winds over Norway strong to a gale, and the Northerly and North-Easterly winds over our western districts blowing equally strongly. Fresh South-Easterly to South-Westerly breezes prevailing in some parts of the Mediterranean and Adriatic. Latter currents increasing in force during day, and another cyclonic circulation appearing over the Gulfs of Lion and Genoa. Northerly gale setting in over the Baltic, but wind decreasing in force over Norway and our own western districts.

Barometer at 8 a.m. highest, 30·26 ins. at Patras, and 30·4 ins. at Blacksod Point. Lowest, 29·1 ins. and less in a disturbance over the Gulf of Finland, and below 29·5 ins. in another system having its centre near Jersey. Both depressions moving south-eastwards later, and a new one forming in the Riviera and its neighbourhood. Barometer rising decidedly over our Islands and Scandinavia, and an anticyclone advancing from the Atlantic.

Monday, 12th January, 1903.

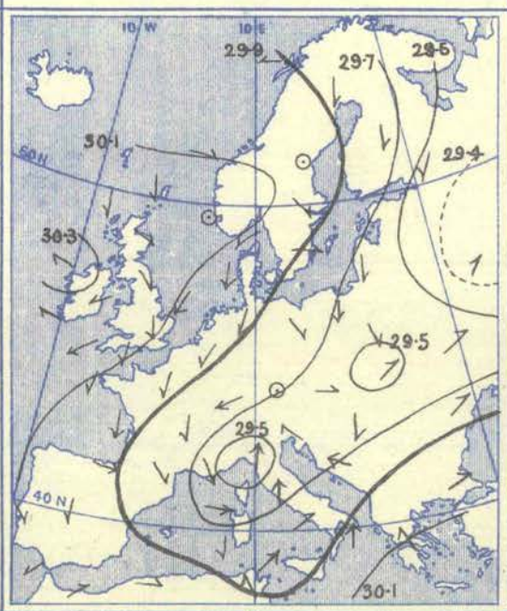
Temperature and Weather. 8 a.m.

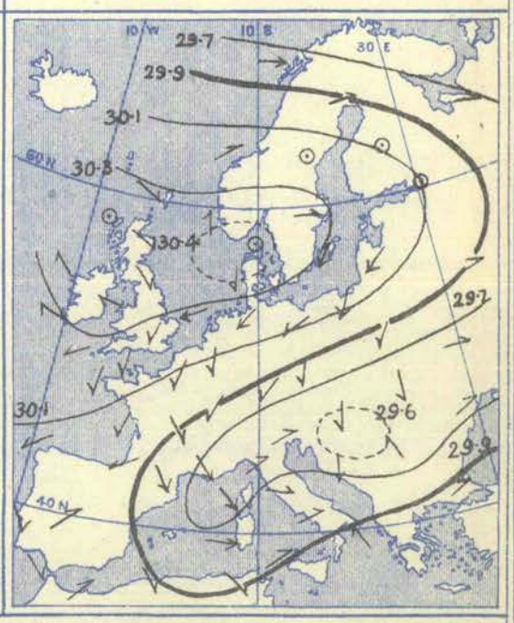


Weather at 8 a.m. fine and bright at most British and Irish and Scandinavian stations, but snow showers falling on our east coasts. Very cloudy or overcast in most other regions, with rain or snow over the central countries, and rain at Biarritz, Rome, and Pesaro. Slight snow experienced in a few parts of our Islands and France later, and heavier amounts over central Europe; considerable falls of rain occurring in Italy.

Temperature fallen generally, but risen in some parts of Austria-Hungary and south-eastern Europe. Readings at 8 a.m. highest, 65° at Palermo, 64° at Tunis, 59° at Lésina and Brindisi, and 58° at Athens, Naples, and Leghorn. Lowest, −21° at Haparanda, −2° at Archangel, +3° at Karlstad and Hangö, 15° at St. Petersburg, 23° at Fanö, 26° at Parsonstown, 29° over central England and at Leith, and 32° at Paris and Limoges. Rising to 72° at Palermo, 68° at La Calle, 65° at Malta, and 61° at Constantinople and Hermanstadt during day, but remaining below 40° over our Islands and the inland parts of France, and not exceeding the freezing point over Scandinavia and northern Russia.

Barometer and Wind. 8 a.m. 6 p.m.



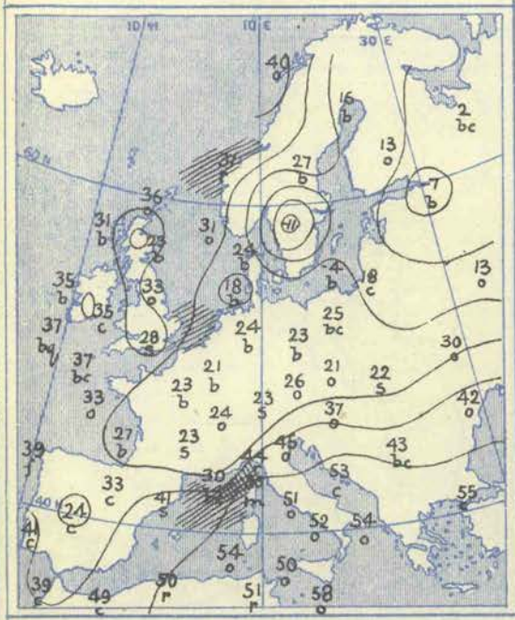


Wind in morning Northerly or North-Easterly over our Islands and the adjacent parts of the Continent, but drawing into North-West in the south of France, and into South and South-East over Italy and the Adriatic. Moderate in force as a whole, but fresh or strong in several places. Light from the Northward in the extreme north of Russia, and from the Southward or South-Westward in the south of that country. No great or general change later, but strong Westerly wind springing up in the north of Norway.

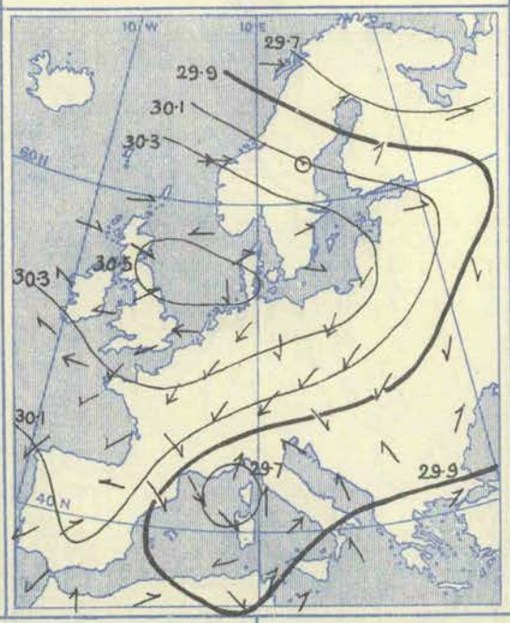
Barometer risen over the north-western and western countries, fallen in the east and south-east. Readings at 8 a.m. highest, 30·3 ins. over the north-west of Ireland, and 30·10 ins. and upwards in Greece. Lowest, below 29·4 ins. over central Russia, and below 29·5 ins. over Galicia and the neighbourhood of the Gulf of Genoa. Pressure increasing very generally during day excepting at Bodö, and barometer becoming highest over Denmark and the eastern portion of the North Sea.

Tuesday, 13th January, 1903.

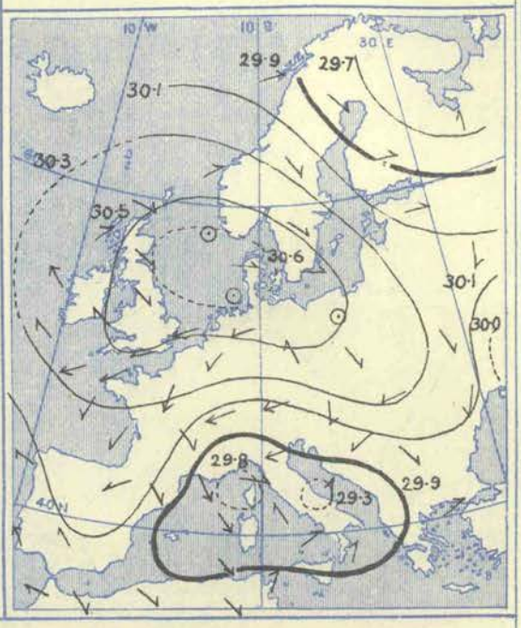
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in most parts of north-western Europe, but rain falling at Christiansund. Cloudy or dull in most other localities, with snow in the north of Finland, at Lyons, Turin, Barcelona, Bilbao, and in many parts of central Europe, and rain at Florence. Continuing fine in most northern and western regions all day, but a good deal of rain falling over Italy, and considerable snow or rain in some Austrian-Hungarian districts.

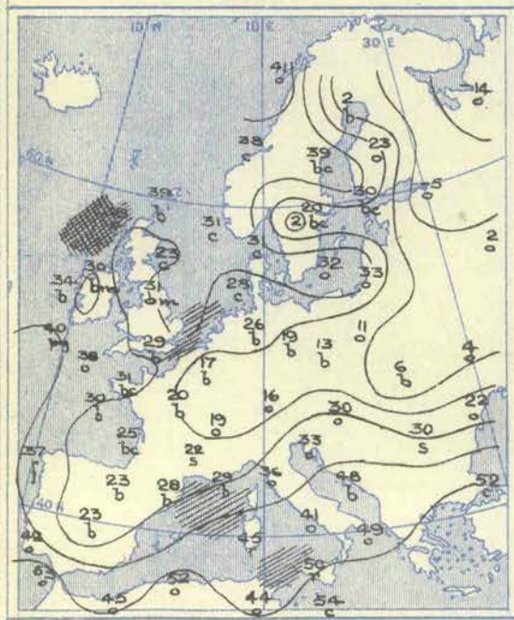
Temperature fallen decidedly generally, but risen rapidly over Finland and the north of Scandinavia, and to a less extent in Ireland. Readings at 8 a.m. highest, 58° at Malta, 55° at Constantinople, 54° at Brindisi and Cagliari, and 53° at Lésina. Lowest, −11° at Karlstad, −7° at St. Petersburg, +2° at Archangel, 13° at Moscow, 18° at Memel, Fanö, and Nairn, 24° at Oxford and Madrid, 23° at Paris, Lyons, Munich, and Berlin, and 31° at Nice. Rising subsequently to 42° in the south of Ireland, to above 55° in the south of Spain and on most of the southern shores of the Mediterranean, to 64° at Nemours, and to 66° at Brindisi. Remaining below 32° in many parts of Scotland and France and in most parts of central and northern Europe.

Wind in morning showing a complete cyclonic circulation around the Gulf of Genoa and its vicinity, the North-Westerly wind at Cape Sicié and that from South-South-West at Leghorn being strong. Anticyclonic in nearly all other parts of our area, the Westerly current in Norway being strong to a gale, and the Easterly winds on our own south-east coasts fresh or strong in force. Not much change during day, but wind shifting to North-West and moderating at Leghorn, and Westerly current becoming much feebler in Norway.

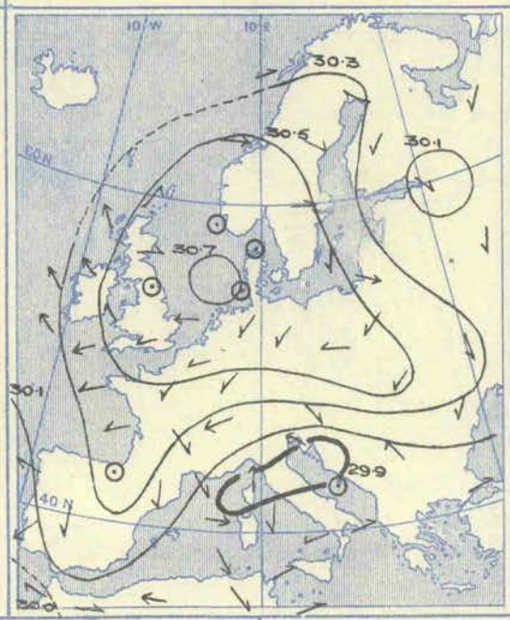
Barometer in morning ranging from above 30·5 ins. to 30·2 ins. in a large anticyclonic system having its centre over the North Sea and Denmark, to 29·7 ins. both over Lapland and in a cyclonic disturbance over the Gulf of Genoa and the north of Italy. Low-pressure areas both moving eastwards later, and barometer rising generally. Anticyclone increasing in size and intensity.

Wednesday, 14th January, 1903.

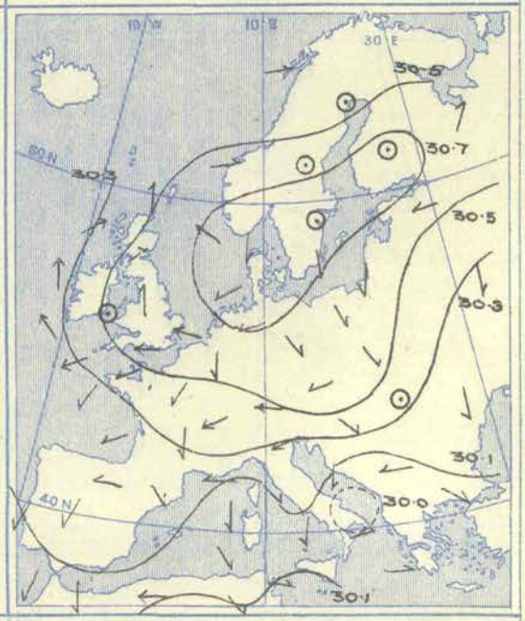
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull in most regions, but fine and bright in many parts of Germany, France, the Netherlands, the United Kingdom, and Sweden. Fog prevailing at Corunna, slight snow at Lyons, and showers of rain at Valencia Island. Continuing very dry all day in most parts of our area, but some rain falling at Lésina and in some Italian localities, and snow at Munich and at a few Russian stations.

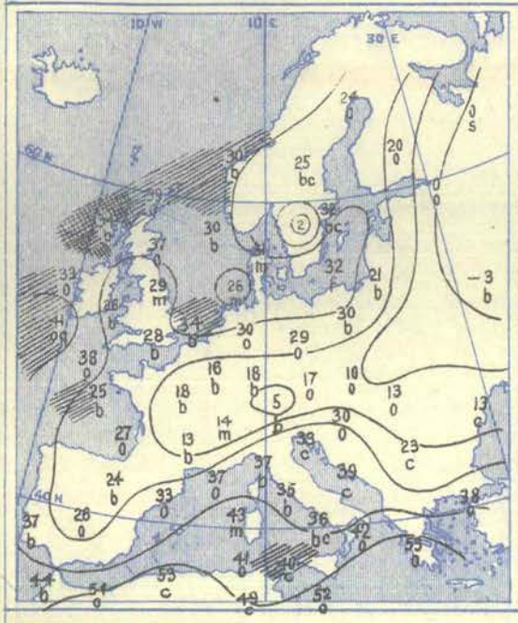
Temperature risen in Scotland, Denmark, and most parts of Sweden; fallen in almost all other districts. Readings at 8 a.m. highest, 54° at Malta, 53° at San Fernando, 52° at Constantinople and Algiers, and 50° at Palermo and Oran, 41° at Bodö. Lowest, −14° at Archangel −5° at St. Petersburg, +2° at Moscow, Karlstad, and Haparanda, 4° at Kiev, 13° at Breslau, 17° at Brussels, 19° at Loughborough, 20° at Paris, 23° at Madrid, 29° at Nice, and 32° at Aumale. Scarcely exceeding the freezing point during day over the greater part of the United Kingdom, and remaining below it over northern and central Europe generally, and also at many French stations. Rising to 59° at San Fernando, 63° at Malta and Nemours, and to 66° at Athens.

Wind in morning light to fresh or strong and irregularly cyclonic over Italy, and light and cyclonic over the north of Russia. Anticyclonic in all other regions, the Easterly winds over our own southern districts, the South-Easterly current in the west, and the Westerly wind at Christiansund all being strong in force. No general change during day, but Russian cyclonic movement dying out.

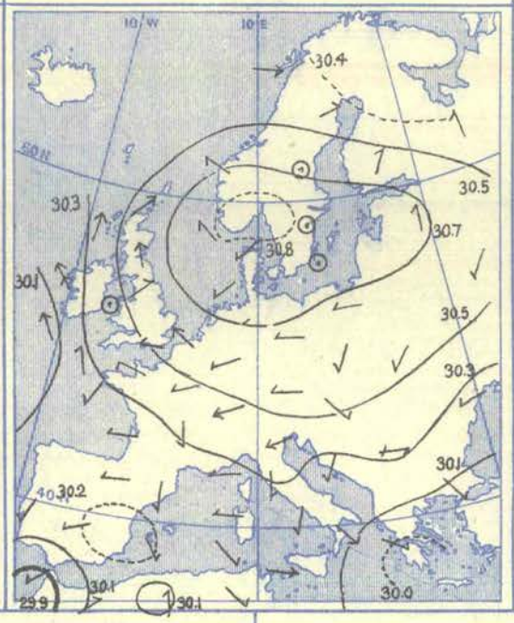
Barometer risen generally, but fallen at St. Petersburg and on our extreme north-west coasts. Readings at 8 a.m. highest, 30·7 ins. to 30·4 ins. in a very large anticyclonic system with its centre over the North Sea. Lowest, 29·9 ins. and less in a complex cyclonic disturbance over northern Italy; below 30·1 ins. in another system lying over Lake Onega and St. Petersburg. Latter depression dispersing later, and anticyclone increasing considerably both in size and intensity. Pressure decreasing on our western coasts.

Thursday, January 15th, 1903.

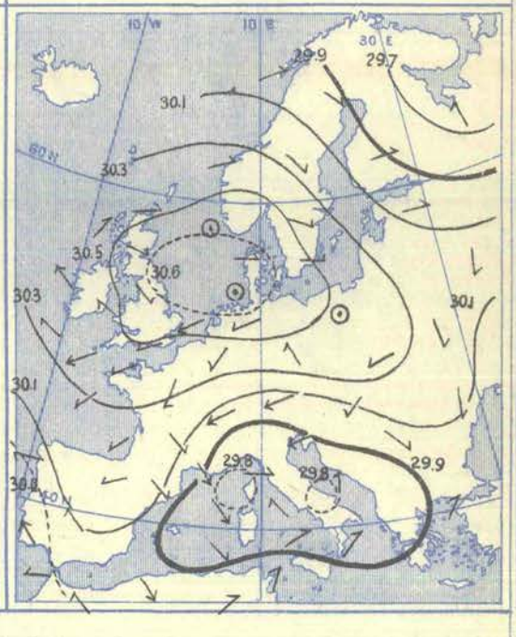
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull in most parts of our area, but fine and bright in many parts of Italy, France, Spain, Germany, Scandinavia, and at most stations in Great Britain. Foggy at Faerder and Wisby, and snow falling at Archangel. Very dry in nearly all places during day, but considerable rain falling at Valencia Island, Cette, and Brindisi, and a slight amount at Palermo.

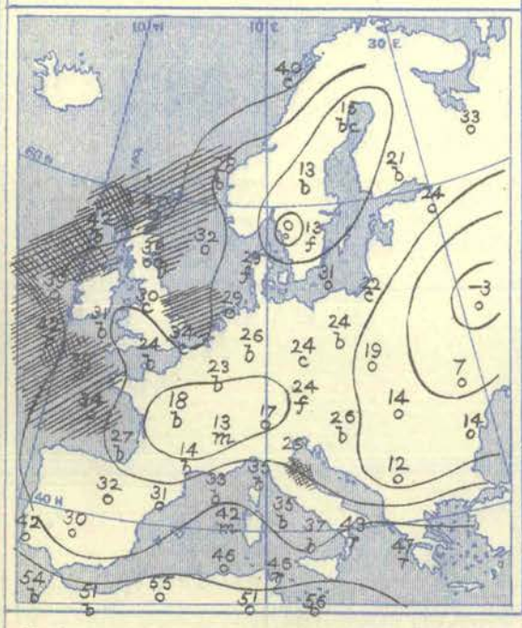
Temperature risen in Scotland and the extreme north of Europe, as well as over Algiers and the Riviera; fallen in nearly all other regions. Readings at 8 a.m., highest, 54° at Oran, 53° at Athens, 52° at Malta, 41° in the south of Ireland and at Bodö. Lowest, -3° at Moscow, 0° (zero) at Archangel and St. Petersburg, +2° at Karlstad, 5° at Munich, 10° at Lemberg, 13° at Odessa and Lyons, 18° at Paris, 21° at Bath, 24° at Biarritz, and 26° at Madrid. Remaining below 32° all day in many parts of France, the Netherlands, and central and northern Europe, but rising to 52° at Cagliari, 57° at Athens, 58° at Palermo, 59° at San Fernando and Tunis, and 63° at Nemours. Maxima not much above 32° over England.

Wind in morning light and anticyclonic over the major portion of our area, but Easterly and South-Easterly to Southerly winds rather strong over the United Kingdom. Cyclonic, but of little force, in the south of Spain and various parts of the Mediterranean. South-Easterly winds increasing to a strong gale on many parts of our western coasts. No great change elsewhere.

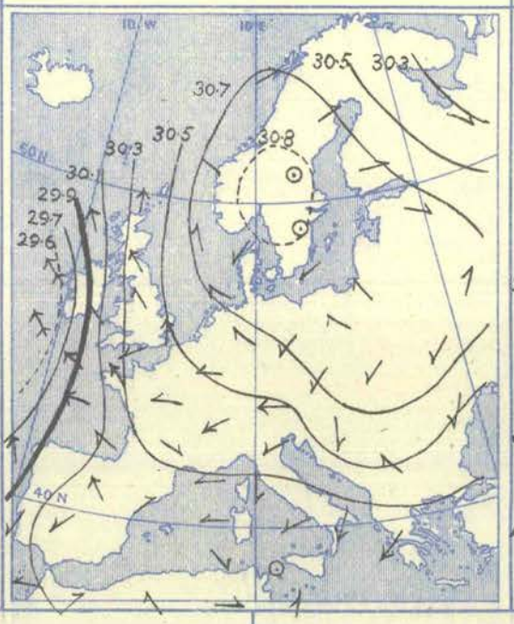
Barometer fallen in the west of France and over our Islands; risen in most other regions. Readings at 8 a.m. ranging from above 30·8 ins. over southern Scandinavia, in the centre of a very extensive high pressure system, to 30·1 at Valencia Island; 29·98 ins. at Athens, and 29·89 ins. at San Fernando. Pressure increasing in most places, and anticyclone spreading eastwards to central Russia, but decreasing over our Islands,—most in the west and south-west. South-Easterly and Southerly gradients becoming steep over our western and northern districts.

Friday, January 16th, 1903.

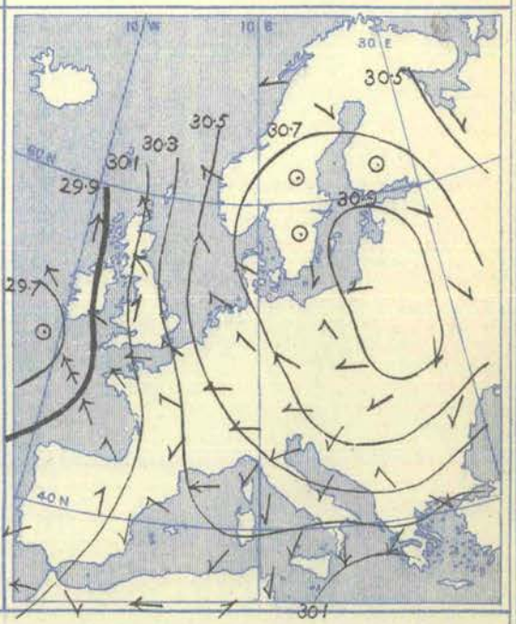
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull generally, but fine and bright in most parts of Great Britain, France, Italy, and at several Scandinavian stations. Rain falling at Valencia Island, and also at Brindisi, Palermo, and Patras, and fog prevailing at Christiania, Stockholm, and Hangö. Rain experienced later at most of our own western stations, on the west coast of France, and in various parts of the Peninsula. Amounts not large as a rule, but as much as 0·7 in. at Scilly, 0·9 in. at Barcelona, and 1·0 in. in the south of Ireland.

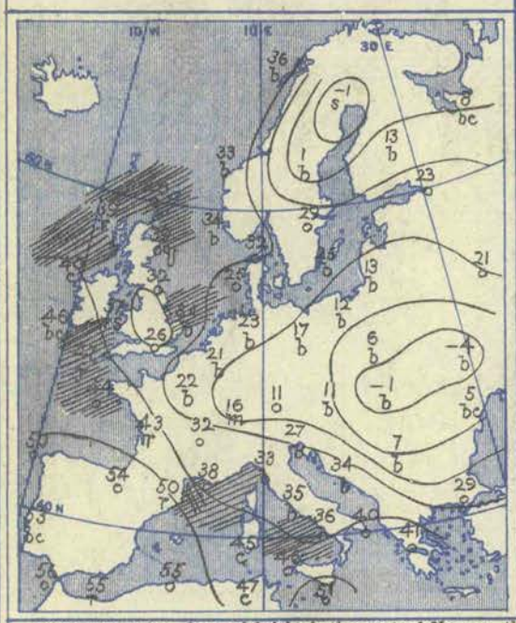
Temperature risen generally, but fallen decidedly over Sweden and south-eastern Europe. Readings at 8 a.m. highest, 56° at Malta, 55° at Algiers, 54° at San Fernando. Lowest, (1) -3° at Moscow, +7° at Kiev, 12° at Nicolaieff and Hermanstadt; (2) 0° (zero) at Karlstad, 13° at Hernösand and Stockholm; (3) 13° at Belfort, 18° at Paris; (4) 23° at Loughborough, and 24° in London. Rising during day to 50° at Marseilles, 54° at Biarritz, 55° at Cagliari, 59° at Malta, and 63° at Nemours. Scarcely exceeding the freezing point over central and south-eastern England, and remaining below it over all the more northern countries on the Continent.

Wind in morning strong to a gale from the Southward or South-Eastward on our south-western, western, and northern coasts, and more moderate from the South-Eastward over our eastern and southern districts. Chiefly anticyclonic elsewhere, both the Westerly current in the far north and that from North-East or East in the more southern countries being light or moderate. Very little change as a whole later, but wind becoming more Northerly over Italy and increasing somewhat in force.

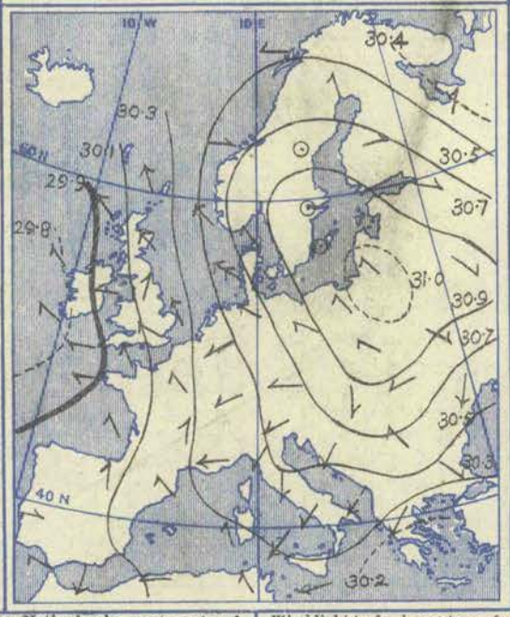
Barometer at 8 a.m. ranging from 30·8 ins. and a little above in a large anticyclone with its central portion over Scandinavia, to 29·6 ins. on the west coast of Ireland. Anticyclone increasing in intensity and moving south-eastwards during day, but barometer falling over our Islands and all the western countries. A cyclonic disturbance from the Atlantic spreading South-Eastwards over our south-west coasts and the west of France.

Saturday, 17th January, 1903.

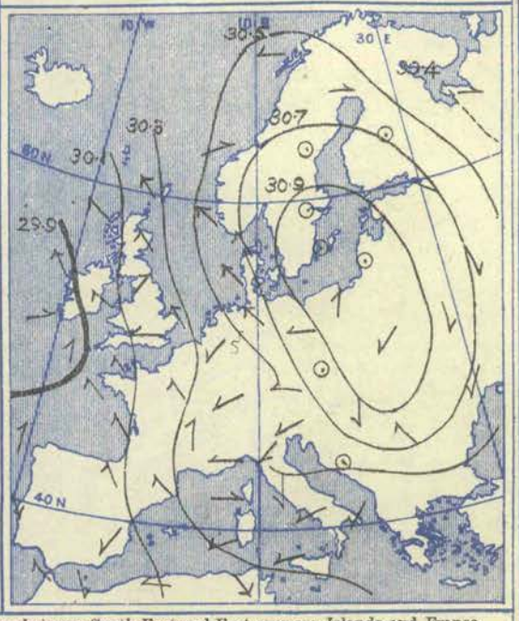
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in the west of Norway, the Netherlands, most parts of Germany and Austria-Hungary, and at several Italian stations. Cloudy or overcast in nearly all other regions. Rain falling in the west of France, sleet at Jersey, Holyhead and Malin Head, and snow at Haparanda. Rain or sleet becoming general over our western and southern districts later, and a "silver thaw" occurring in the Metropolis and its vicinity. Heavy rain falling in some southern localities—as much as 2·6 ins. at Cette.

Temperature risen quickly in most parts of France, and a few degrees over Ireland and England; fallen over Europe generally, but risen in some Scandinavian localities. Readings at 8 a.m. highest, 56° at San Fernando, 55° on the coast of Algeria, 54° at Biarritz. Lowest, (1) −4° at Kiev, +5° on the northern shores of the Black Sea; (2), −1° at Haparanda, and +1° at Hernösand; (3), 11° at Munich and Vienna, 16° at Belfort, 22° at Paris; (4), 26° in London, and 28° at Newton Reigny. Remaining below 40° all day in most parts of England, but rising to 50° at Scilly, 57° at Biarritz, 59° at Lisbon, 61° at Alicante, 63° at Nemours, and 66° at Algiers. Much below 32° all day over northern and central Europe.

Wind light to fresh, or strong from between South-East and East over our Islands and France, and strong to a gale from East-South-East in Denmark. Moderate or light from the Westward at Christiansund and in Finland, and generally North-Easterly over southern Europe and the Mediterranean. North-Easterly current blowing a moderate gale in Greece, and a strong breeze at Brindisi. Very little change later.

Barometer risen in the more eastern countries of Europe and also in Ireland, fallen in the intervening regions. Readings at 8 a.m. highest, 31·02 ins. at Memel, in the centre of a large area of high-pressure; lowest, 29·8 ins. on the west coast of Ireland. Pressure increasing somewhat in most regions during day, but no change taking place in the general distribution.

IV.—GENERAL NOTES, etc.

At the commencement of the period a very large low-pressure area, with two or three distinct minima stretched North-Eastwards from Brittany to St. Petersburg, and the winds were consequently from between North-East and North in the northern countries, and from some Southerly or Westerly point in the more southern regions. This system soon disappeared in a south-easterly direction, and an anticyclone began to spread over our own northern districts from the Atlantic. During the remainder of the week this was the dominant system over Europe. Its centre at first moved eastwards to the north of Denmark, subsequently north-Eastwards to Scandinavia, and finally south-eastwards to western Russia. At the same time it increased gradually in size and intensity, until on Saturday the barometer in its central portion was a little above 31·0 ins. The only important cyclonic systems were some of rather irregular form, which appeared from time to time over Italy and its neighbourhood, and a large disturbance which spread over our Islands from the westward as the week drew towards its close. This system caused severe Southerly and South-Easterly gales on several parts of our western coasts, accompanied by a considerable rise of temperature, which brought a sudden thaw to France and Great Britain. Temperature was very low generally over all the more southern and central countries and even over Italy, where the beginning of the week was very warm, the thermometer subsequently became below the normal. Little rain or snow was experienced over northern and central Europe, but in the more southern and south-western regions rain was frequent, and sometimes fell in considerable amounts. Over the United Kingdom the weather was mostly dry except at the commencement and end of the week.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the reading at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Belgium, and Holland; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. n France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; at 9.25 a.m. in Spain, and 9 36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands; 4.36 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.25 p.m. in Spain; 6.51 p.m. in Algeria 6·59 p.m. in Russia; 7 p.m. in Germany, Denmark, Norway, and Sweden; 8 p.m. in Austria and Italy, and 9 p.m. in Holland and Belgium. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 8.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	8·3	+ 2·3	18	+ 5
STRATHPEFFER SPA	19·5	+ 12·3	40	+ 25
EDINBURGH	2.5	− 4·5	5	− 9
COCKLE PARK	2·5	—	5	—
NEWCASTLE-ON-TYNE	2·0	—	4	—
YORK	13·9	+ 7·4	26	+ 14
CROMER	16·8	—	31	—
LOWESTOFT	16·2	—	29	—
HOLLESLEY BAY	22·0	—	39	—
DUNMOW	21·8	—	39	—
SHEFFIELD				
WORKSOP	19·4	+ 11·4	35	+ 21
THURCASTON	24·2	+ 15·5	44	+ 28
MARGATE	18·4	+ 8·2	32	+ 15
BROADSTAIRS	17·1	—	40	—
EASTBOURNE	22·2	+ 10·2	39	+ 18
BRIGHTON	25·9	+ 14·6	45	+ 25
WORTHING	29·8	—	52	—
BOGNOR	25·4†	—	44†	—
WATERGATE PARK	28·1	—	49	—
WESTBOURNE	21·9†	+ 9·7	38†	+ 17
VENTNOR HOSPITAL	20·1	+ 9·1	35	+ 16
BOURNEMOUTH	—	—	—	—
SOUTHPORT	22·2	—	41	—
RHYL	22·3	—	41	—
COLWYN BAY	—	—	—	—
ABERDOVEY	32·8†	—	59†	—
TENBY	24·4	+11·5	43	+ 20
TORQUAY	10·5	− 2·4	18	− 4
NEWQUAY				
GUERNSEY	9·3†	− 2·2	16†	− 4

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 3.] *Fourth Series.* WEEK ENDING SATURDAY, JANUARY 24TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 14.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	48	18	42·5	34·1	38·5	1 above	1	− 5	29	− 8	1	− 17	147	+ 37
	1. SCOTLAND, EAST	50	20	41·5	32·5	37·2	0 average	0	− 7	34	− 9	0	− 21	171	+ 43
	2. ENGLAND, N.E.	50	27	41·8	34·1	38·1	0 average	0	− 7	27	− 10	11	− 10	128	+ 16
	3. ENGLAND, EAST	49	22	42·7	34·2	38·7	1 above	2	− 6	30	− 12	31	+ 8	112	− 13
	4. MIDLAND COUNTIES	50	22	41·5	33·4	37·6	0 average	0	− 10	31	− 12	27	− 1	142	+ 13
	5. ENGLAND, SOUTH	50	26	45·1	37·4	41·4	2 above	9	− 3	19	− 14	44	+ 9	93	− 6
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	49	31	43·8	36·3	40·2	1 above	5	− 5	22	− 9	8	− 23	128	+ 36
	7. ENGLAND, N.W.	54	26	43·7	35·4	39·7	1 above	5	− 4	25	− 6	29	+ 1	120	+ 29
	8. ENGLAND, S.W.	51	30	46·9	39·6	43·4	2 above	20	+ 5	7	− 17	54	+ 8	75	+ 4
	9. IRELAND, NORTH	53	32	45·7	37·8	41·9	2 above	10	− 3	18	− 9	14	− 25	113	+ 33
	10. IRELAND, SOUTH	53	32	48·4	39·1	44·0	2 above	26	+ 6	8	− 13	49	− 12	67	+ 5
	— CHANNEL ISLANDS	53	35	50·0	42·7	46·5	3 above	32	+ 9	0	− 11	89	+ 19	31	− 1

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 14.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	19	7 more	11	− 4	3·1	− 0·7	5	− 2	10	− 3	21	+ 3	14	+ 2
	1. SCOTLAND, EAST	4	6	0 average	11	− 1	2·5	+ 0·6	7	− 3	14	− 6	19	− 9	12	− 6
	2. ENGLAND, N.E.	4	2	2 less	13	+ 2	1·9	+ 0·6	8	− 1	13	− 2	26	+ 1	16	+ 1
	3. ENGLAND, EAST	5	4	0 average	11	− 1	1·1	− 0·2	5	− 6	9	− 11	36	+ 4	22	+ 2
	4. MIDLAND COUNTIES	4	3	2 less	11	0	1·6	0·0	5	− 6	9	− 10	32*	+ 7	19	+ 4
	5. ENGLAND, SOUTH	5	2	3 less	13	+ 2	1·5	− 0·3	6	− 5	10	− 9	31	− 2	18	− 1
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	19	8 more	12	− 2	4·2	+ 0·6	5	− 4	10	− 7	16	− 9	10	− 6
	7. ENGLAND, N.W.	5	7	0 average	13	+ 1	2·4	+ 0·3	9	0	15	0	36	+ 11	22	+ 7
	8. ENGLAND, S.W.	4	7	2 less	12	− 1	3·2	+ 0·5	7	− 5	13	− 8	33*	− 3	17	− 2
	9. IRELAND, NORTH	5	8	1 more	13	− 2	3·6	+ 1·3	10	− 1	18	− 2	31	+ 1	19	+ 1
	10. IRELAND, SOUTH	6	13	4 more	16	+ 2	4·3	+ 1·4	11	− 3	19	− 5	31	− 6	19	− 4
	— CHANNEL ISLANDS	5	4	4 less	16	+ 2	2·4	+ 0·1	12	− 3	19	− 5	34	− 7	19	− 4

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period was of an unsettled type very generally, but more especially so in the west and extreme north, where the rainfall was heavy. In the east and south, although rain fell pretty frequently, it was small in quantity. Much fog prevailed over England during the earlier days of the period. Lightning was observed at some western and northern stations on Thursday, and distant thunder was heard at Churchstoke.

Temperature was a little above the mean as a whole, and especially in the Channel Islands, but was only just equal to it in Scotland E., England N.E., and the Midland Counties. The highest of the maxima occurred towards the end of the week, and ranged from 54° in England N.W., and from 53° to 50° in most other districts, to 48° in Scotland N. The lowest of the minima were recorded, as a rule, on the 18th, when they ranged from 18° in Scotland N., 20° in Scotland E., and 22° in the Midland Counties, to 32° over Ireland, and 35° in the Channel Islands.

Rainfall was much more than the mean in Scotland N. and W. At Fort William the falls on Wednesday, Friday, and Saturday respectively were 1·14 ins., 1·03 ins., and 1·97 ins., and those at Laudale for the same days, 1·72 ins., 1·03 ins., and 1·40 ins. It was rather more than the average in the Irish districts. In Scotland E., England E. and N.W. the mean was just equalled, while in the remaining districts there was a deficit.

Bright Sunshine was deficient in almost all parts of the Kingdom, the percentage of the possible amount of duration ranging from 19° in the Channel Islands, and 19° or 18° in Ireland, to 10° in Scotland N. and England S., and to 9° in the Midland Counties and England E.

Barometer and Wind.—During the greater part of the week the barometer was highest to the north-eastward of our Islands, and the depressions which approached us from the Atlantic moved in a northerly or north-easterly direction outside our western and north-western coasts. By Friday, however, pressure had become highest over Spain and the Bay of Biscay, and the cyclonic systems travelled in a more Easterly direction and spread more over the Kingdom. The winds, which were at first moderate to strong from between South-East and South, consequently became South-Westerly and Westerly, increased in force generally, and blew a gale in several western and northern districts.

207 | 90 Wy & S. Ltd
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 13 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	45	37	43·6	39·0	41·4	+ 2·3	4	12	7	1·50	+ 0·66	*	*	*	*
	Stornoway	48	34	45·4	37·0	41·4	+ 2·6	10	21	3	1·38	+ 0·31	3·0	− 4·5	6	− 9
	Wick	45	32	43·3	36·0	39·8	+ 2·1	4	23	2	0·18	− 0·30	*	*	*	*
	Lairg Ⓢ	43	18	38·7	29·3	34·2	− 1·0	0	55	4	1·24	+ 0·45	*	*	*	*
	Glencarron Ⓢ	46	27	41·1	31·3	36·4	− 0·8	0	39	4	2·82	+ 0·67	*	*	*	*
	Fort Augustus Ⓢ	45	21	41·4	31·0	36·4	− 1·7	0	39	5	1·44	+ 0·39	4·3	− 0·1	8	0
	Fort William	48	31	44·1	35·2	39·8	+ 1·0	6	26	4	4·52	+ 2·45	2·7	− 4·0	5	− 8
1. SCOTLAND E.	Nairn	49	20	43·6	29·3	36·7	− 0·7	4	47	4	0·13	− 0·30	*	*	*	*
	Aberdeen	46	34	43·6	37·3	40·6	+ 3·0	4	19	4	0·34	− 0·18	8·5	− 4·3	16	− 8
	Braemar Ⓢ	41	25	37·6	31·2	34·5	+ 0·3	0	53	2	0·59	− 0·08	*	*	*	*
	Ochtertyre Ⓢ	48	28	40·1	32·6	36·5	− 0·2	0	39	7	1·85	+ 0·80	*	*	*	*
	Leith Ⓢ	50	29	44·0	32·7	38·6	− 0·4	6	36	5	0·24	− 0·15	*	*	*	*
	Marchmont Ⓢ	45	29	40·0	32·0	36·2	− 0·3	0	41	3	0·42	− 0·18	9·0	− 1·5	17	− 3
2. ENGLAND, N.E.	Alnwick Castle	49	30	41·7	33·0	37·5	− 0·2	0	32	3	0·12	− 0·38	*	*	*	*
	Durham	48	31	39·5	33·7	36·7	− 0·3	0	37	3	0·17	− 0·26	8·6	− 2·5	16	− 5
	Shields	50	31	43·3	32·7	38·2	− 0·4	4	35	3	0·12	− 0·27	*	*	*	*
	Scarborough Ⓜ	48	34	43·2	35·9	39·7	+ 1·3	3	23	6	0·21	− 0·23	7·3	—	13	—
	Spurn Head	47	35	41·7	36·1	39·0	+ 0·8	0	21	5	0·22	− 0·07	*	*	*	*
	Fulbeck (Lincolnshire)	48	27	41·1	32·9	37·2	+ 0·8	0	34	6	0·28	− 0·09	5·3	—	9	—
3. ENGLAND, E.	Hillington Ⓜ	48	22	42·0	31·7	37·1	+ 0·2	0	34	6	0·36	− 0·09	5·2	− 6·0	9	− 10
	Yarmouth	47	33	42·0	35·6	38·9	+ 1·5	0	22	5	0·46	+ 0·03	*	*	*	*
	Geldeston	48	32	43·1	35·3	39·4	+ 1·5	3	26	6	0·64	− 0·28	4·3	− 8·2	8	− 14
	Cambridge	49	31	43·7	33·3	38·7	+ 1·1	5	33	4	0·14	− 0·20	5·7	− 6·5	10	− 11
	Felixstowe	48	33	43·0	35·9	39·6	+ 1·2	3	23	5	0·63	—	6·3†	—	11†	—
	Rothamsted	48	25	42·2	31·9	37·3	0·0	1	37	6	0·29	− 0·24	6·6	− 4·6	11	− 8
	Shoeburyness	48	30	43·0	36·0	39·6	+ 1·1	3	22	6	0·31	—	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	48	28	40·6	32·6	36·8	− 0·2	0	36	4	0·28	− 0·29	7·0	—	13	—
	Bawtry (Hesley Hall)	48	24	40·9	32·3	36·8	− 0·8	0	36	3	0·15	− 0·25	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Colly Weston (Stamford)	49	22	41·7	31·1	36·6	− 0·3	0	38	5	0·29	− 0·14	*	*	*	*
	Cheadle Ⓜ	46	30	40·1	33·7	37·0	+ 0·4	0	55	6	0·38	− 0·20	*	*	*	*
	Birmingham (Edgbaston)	48	32	41·5	34·9	38·3	+ 0·3	0	26	2	0·19	− 0·29	5·7	—	10	—
	Churchstoke Ⓜ	49	31	42·3	35·2	38·9	+ 1·2	1	25	5	0·48	− 0·12	4·7	− 6·8	8	− 12
	Hereford Ⓜ	50	27	41·9	33·0	37·6	− 1·0	0	31	6	0·69	+ 0·14	*	*	*	*
	Cirencester	47	27	41·9	33·6	37·9	+ 0·3	0	29	5	0·43	− 0·21	6·0	− 5·7	10	− 10
	Oxford	49	28	42·9	34·0	38·6	+ 0·1	3	30	4	0·20	− 0·25	5·7	− 5·6	10	− 10
5. ENGLAND, S.	London	49	26	44·3	34·0	39·4	+ 0·5	6	31	4	0·25	− 0·18	3·3‡	− 3·0‡	6‡	− 5‡
	Swarraton (Alresford) Ⓜ	48	30	44·0	34·4	39·4	+ 1·8	6	29	7	0·22	− 0·47	*	*	*	*
	Dungeness	47	30	45·7	36·6	41·3	+ 2·0	10	23	4	0·36	− 0·04	7·2	—	12	—
	Hastings (St. Leonards)	47	35	45·2	38·4	41·9	+ 2·4	9	16	5	0·31	− 0·29	10·5	− 3·8	18	− 6
	Southampton	50	34	46·5	38·6	42·7	+ 2·8	19	10	4	0·17	− 0·50	6·6	− 5·3	11	− 9
	Portland Bill	48	41	46·6	42·6	44·7	+ 3·2	19	0	4	0·12	—	*	*	*	*
	Shaftesbury Ⓜ	46	33	43·1	36·9	40·1	+ 2·4	3	19	7	0·27	− 0·39	*	*	*	*
6. SCOTLAND, W	Laudale (Loch Sunart)	49	35	45·6	36·8	41·4	+ 1·5	10	22	4	4·75	+ 2·95	*	*	*	*
	Glasgow	46	31	41·1	35·2	38·3	− 0·2	0	26	5	1·26	+ 0·43	2·3	− 4·0	4	− 7
	Cally Ⓢ	45	32	43·7	34·5	39·3	+ 1·0	5	29	4	1·21	+ 0·17	*	*	*	*
	Douglas (Isle of Man)	48	34	44·6	38·6	41·7	+ 1·2	7	14	5	0·54	− 0·40	8·2	− 4·1	15	− 7
7. ENGLAND N.W.	Newton Reigny	47	26	41·9	31·3	36·8	+ 1·1	0	36	4	0·94	—	6·6	—	12	—
	Stonyhurst	46	33	41·1	35·3	38·3	+ 0·5	0	26	6	0·90	0·00	6·1	− 2·5	11	− 5
	Blackpool Ⓜ	50	30	43·8	35·3	39·7	+ 1·3	5	26	5	0·63	0·00	9·1	− 0·2	16	0
	Manchester (Prestwich)	47	30	42·6	34·0	38·5	+ 0·3	2	30	5	0·65	− 0·02	2·0	—	4	—
	Liverpool Obsy. (Bidston)	49	28	43·1	34·6	39·0	− 0·4	3	28	4	0·33	− 0·15	8·4	—	15	—
	Chester (Hawarden Bridge)	54	29	44·7	35·4	40·2	+ 0·4	8	26	3	0·35	—	*	*	*	*
	Llandudno Ⓜ	49	35	46·7	38·5	42·8	+ 1·5	20	10	4	0·72	+ 0·12	15·2	+ 3·7	27	+ 7
	Holyhead	48	35	45·6	38·7	42·3	+ 0·5	16	9	5	1·02	+ 0·32	*	*	*	*
8. ENGLAND, S W.	Llandovery	—	—	—	—	—	—	—	—	3	1·16	+ 0·06	*	*	*	*
	Pembroke	49	38	47·3	42·4	45·0	+ 2·7	21	0	4	0·68	− 0·13	6·9	− 6·3	12	− 11
	Clifton	49	31	44·7	37·0	41·0	+ 1·3	8	20	5	0·54	− 0·20	*	*	*	*
	Bath	50	30	45·1	34·7	40·1	− 0·1	9	29	3	0·31	− 0·34	5·0	—	9	—
	Arlington (N. Devon)	48	33	46·1	38·7	42·6	+ 2·4	18	9	5	1·33	+ 0·33	*	*	*	*
	Cullompton Ⓜ	50	31	47·4	38·1	42·9	+ 2·9	23	11	4	0·34	− 0·39	5·2	− 5·8	9	− 10
	Falmouth	50	40	48·9	43·4	46·3	+ 2·9	30	0	5	0·63	− 0·50	14·1	+ 0·6	24	+ 1
	Plymouth	51	37	49·0	42·9	46·1	+ 4·0	29	0	3	0·44	− 0·41	2·9	− 9·6	5	− 16
9 IRELAND, N.	Malin Head	49	33	44·0	37·4	40·8	− 0·7	6	18	4	0·63	+ 0·08	*	*	*	*
	Edenfel (Omagh	51	32	44·9	36·4	40·8	+ 2·9	8	23	5	0·77	+ 0·02	*	*	*	*
	Blacksod Point	53	36	47·7	39·6	43·8	+ 1·1	23	7	5	1·31	+ 0·28	*	*	*	*
	Markree Castle	49	34	45·8	38·0	42·1	+ 2·5	18	11	5	0·98	+ 0·18	9·6	− 0·9	17	− 2
	Armagh	47	33	45·7	36·9	41·5	+ 2·5	10	22	4	0·58	− 0·02	10·4	− 0·8	19	− 2
	Donaghadee	49	34	46·1	38·3	42·4	+ 1·9	18	10	6	0·58	− 0·02	*	*	*	*
10. IRELAND, S.	Dublin	52	37	48·6	40·1	44·5	+ 2·7	25	5	5	0·48	0·00	13·1	− 0·9	23	− 2
	Parsonstown	52	34	47·1	37·9	42·7	+ 2·8	22	11	5	1·03	+ 0·39	11·3	− 1·2	20	− 2
	Kilkenny	52	33	47·4	38·0	42·9	+ 1·9	23	11	5	0·90	+ 0·17	*	*	*	*
	Waterford	50	32	48·3	40·6	44·6	+ 2·9	24	4	7	1·28	+ 0·33	*	*	*	*
	Roche's Point	51	34	48·0	40·0	44·2	+ 0·8	24	6	7	1·34	+ 0·21	*	*	*	*
	Valencia	53	35	49·9	39·6	45·0	+ 0·5	31	7	6	2·27	+ 0·93	7·3	− 5·8	13	− 10
	Killarney	51	35	49·6	39·4	44·7	+ 1·5	30	7	5	2·15	+ 0·77	*	*	*	*
	Foynes	52	32	48·5	37·0	43·0	+ 1·5	28	14	4	1·26	+ 0·48	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	42	52·3	45·0	48·8	+ 3·2	48	0	3	0·42	− 0·37	19·2	+ 4·6	32	+ 8
	Jersey	52	35	47·6	40·4	44·1	+ 1·7	21	4	7	0·28	− 0·40	8·7	− 7·7	14	− 13

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

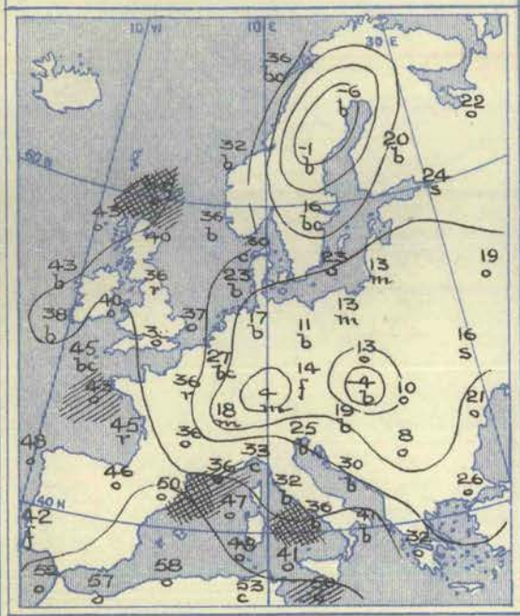
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

For additional Reports of Sunshine, see last page.

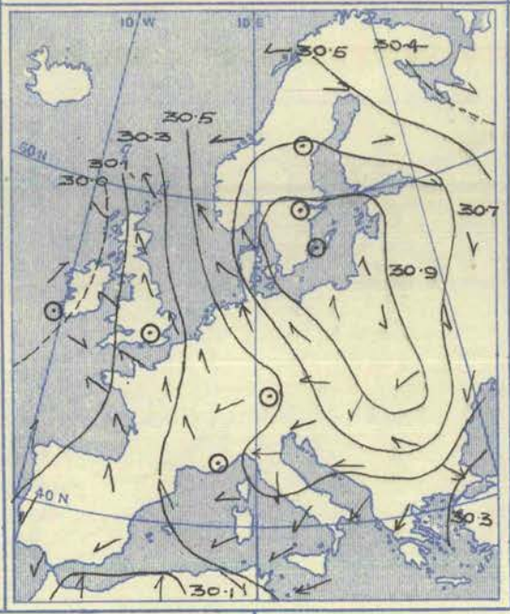
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 18th January, 1903.

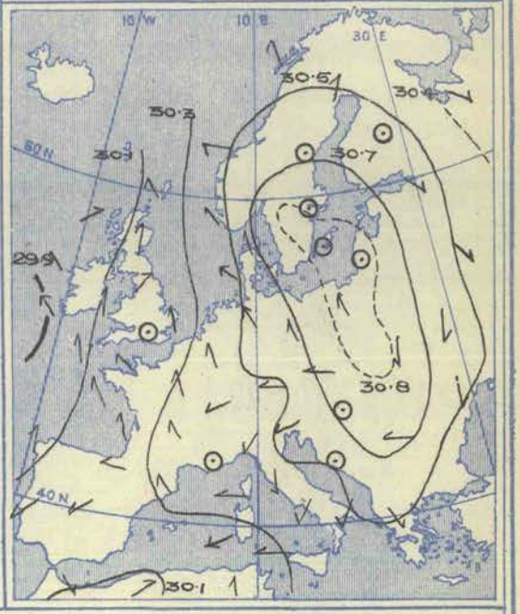
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull generally, but fine and bright in most parts of Scandinavia, the Netherlands, central Europe, and Italy. Rainy at several French and British stations, and snow falling at St. Petersburg and Kiev. Foggy on the Portuguese coast and at Roche's Point and Prague. Fog and mist becoming rather prevalent over England during day, and rain falling in most of our western and southern districts, as well as over France and the adjacent portion of Spain—as much as 2·6 ins. at Cette.

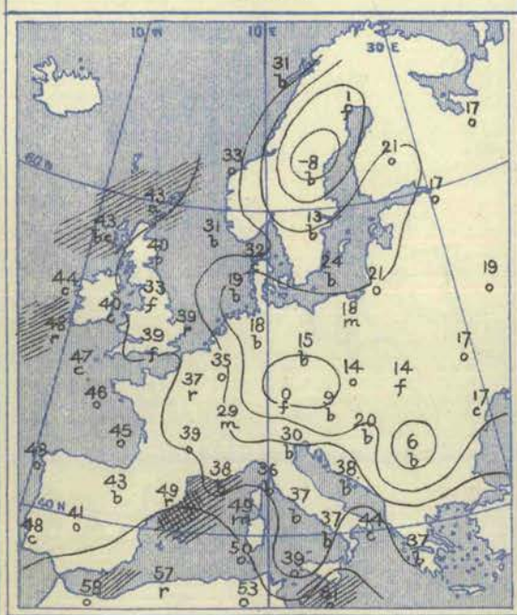
Temperature risen in most regions, but fallen in Scandinavia, Germany, the south of Ireland, and over the Peninsula. Readings at 8 a.m. ranging from 58° at Algiers, and 50° at Barcelona and Malta, to 34° at Oxford, 32° at Athens, below 20° over central Europe generally, to 8° at Hermanstadt and Kharkov, to −4° at Cracow, and to −6° at Haparanda. Rising later to 53° at Scilly, Cagliari, and Malta, 59° at Corunna, 63° at most Algerian stations, and to 68° at Algiers and Biskra. Remaining much below 32° over the central, northern, and eastern countries, and not exceeding 32° at Trieste, 37° at Florence, and 43° at Naples and Madrid.

Wind in morning South-Easterly and light in all the countries bordering the Atlantic and North Sea, light from West in Finland, from North over eastern Europe, and moderate to fresh from North-East or East in the south. Very little change later, but South-Easterly wind increasing to a strong breeze at Fanö and the mouth of the Elbe.

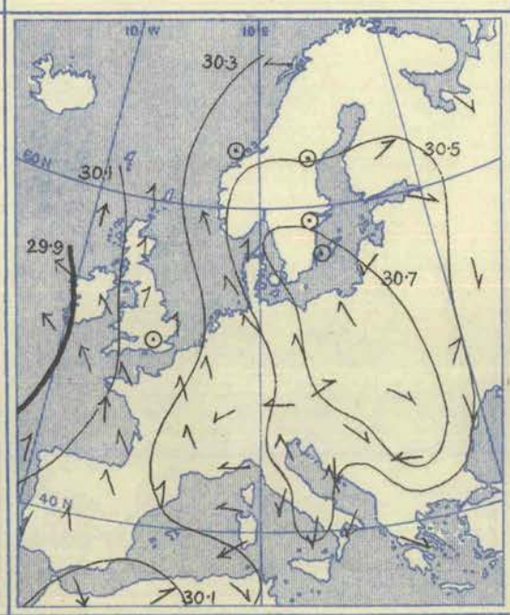
Barometer risen in the extreme west and south, fallen in most other regions. 8 a.m. readings highest, 30·9 ins. and upwards in the central portion of an anticyclone extending from Karlstad to Lemberg. Lowest, 30·0 ins. and less on the west coasts of Ireland and Scotland. Pressure decreasing slowly in most places during day, but very little modification in the general distribution taking place.

Monday, 19th January, 1903.

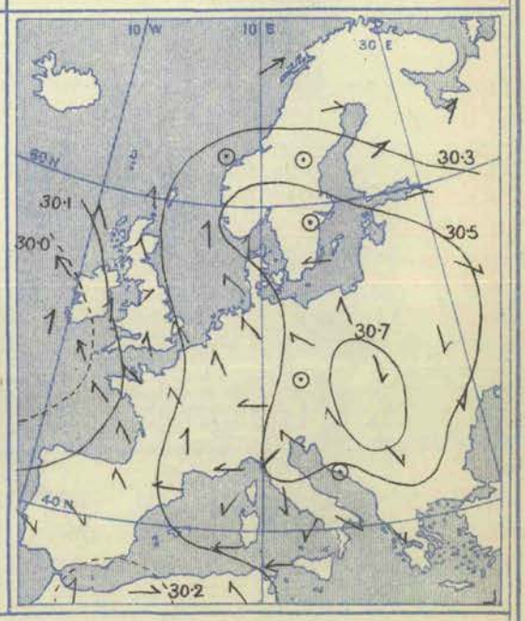
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast generally, but fine and bright in some parts of Scandinavia, Denmark, Germany, Austria-Hungary, and Italy. Rain falling at Oporto, in the north-east of Spain, the north-east of France, and at a few of our own stations, and fog prevailing over England, at Lisbon, and in different parts of central Europe. Rain experienced later over the west and south of our Islands, most parts of France, and in various portions of the Mediterranean and southern Europe. Fog continuing over England.

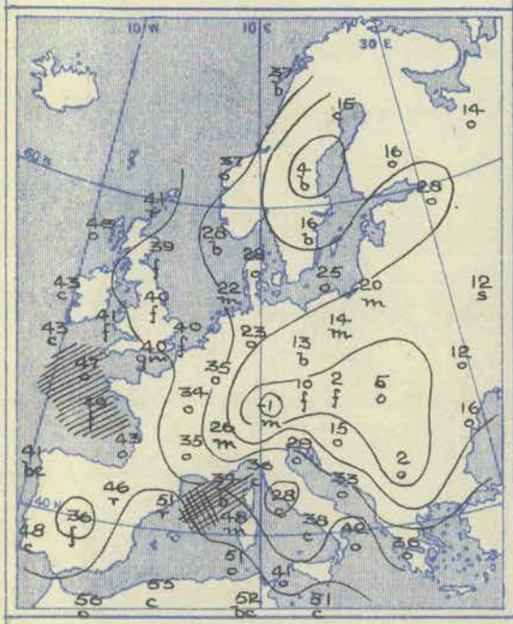
Temperature risen over Ireland, England, North Germany, and Poland, but falling as a whole. Ranging at 8 a.m. from 58° at Algiers and Oran, 51° at Malta, and 50° at Barcelona, to below 40° over the east of England, below 20° over central Europe, to 1° at Haparanda, and to −8° at Hernösand. As low as 26° or 27° over northern Italy, and 32° at Rome. Rising subsequently to 52° at Scilly, 55° at Bordeaux, 56° at Palermo, 57° at Biarritz, and 66° at Algiers. Severe frost all day over Sweden, Russia, Austria-Hungary, and Germany, and thermometer not exceeding 35° at Pesaro, and 41° at Athens.

Wind moderate from between North and East over the Mediterranean and most southern regions, South-Easterly and Southerly over the Peninsula, France, the United Kingdom, (fresh or strong on our west coasts), chiefly Westerly, and light, in the far north, and Northerly over central and southern Russia. No important change later.

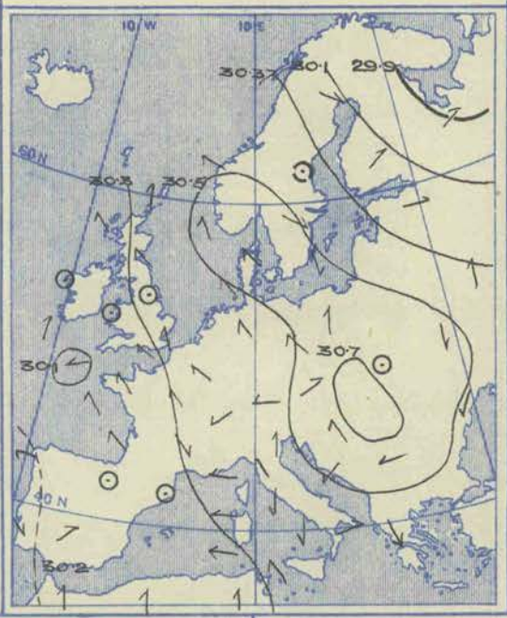
Barometer fallen slowly in most countries, but changed little over Great Britain, France, and on the shores of the Mediterranean. Readings at 8 a.m. highest, 30·7 ins. and above, in the centre of an anticyclone extending South-South-Eastwards from Karlstad to Hermanstadt. Lowest, 29·8 in a disturbance off the south-west of Ireland. Barometer rising in latter region during day, but falling over Sweden, Finland, and the northern parts of Germany.

Tuesday, 20th January, 1903.

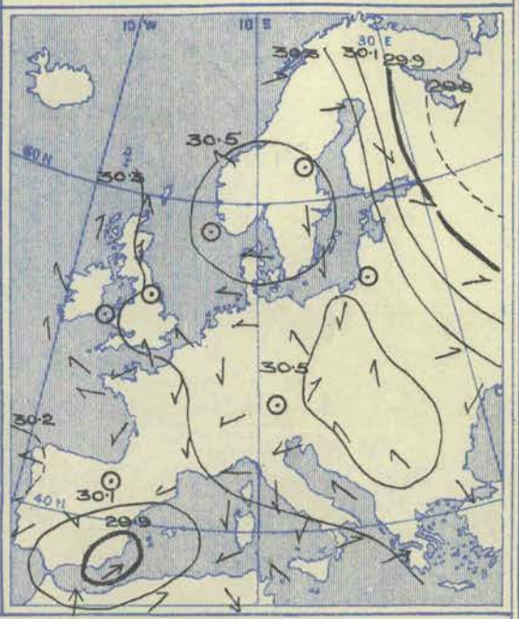
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull generally, but fine and bright in isolated parts of northern and central Europe, as well as at Nice. Fog prevailing in the east of Great Britain, at Madrid, and at some Austria-Hungarian stations, and rain over the north of Spain and adjacent portion of France, and also in the Shetlands. Fog continuing all day in some parts of England. Rain falling later in many localities in southern Europe and Algeria —as much as 1·00 ins. at Barcelona, and 1·14 ins. at Perpignan.

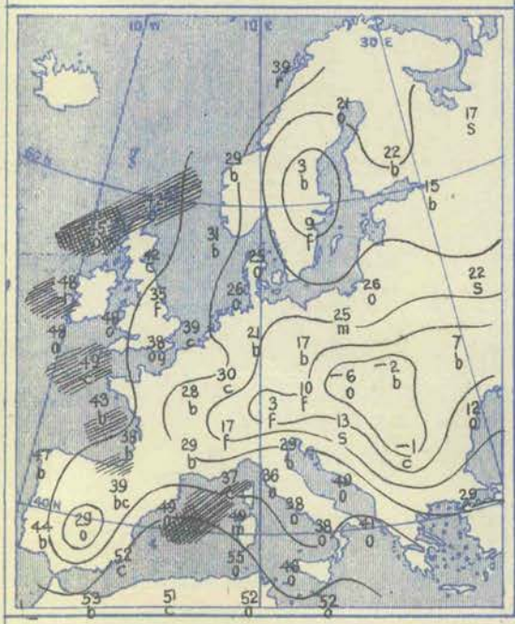
Temperature changed irregularly. Readings at 8 a.m. highest, 56° at Nemours, 55° at Algiers, 51° at Malta, Cagliari, and Barcelona. Lowest, (1) 2° at Cracow and Hermanstadt; (2) 4° at Hernösand; (3) 12° at Moscow; (4) 26° at Pesaro and Florence, and 28° at Rome. As low as 22°, locally, at Nairn. Rising subsequently to 52° at Scilly, 54° at Rochefort, 55° at Malta, 57° at Cagliari, 61° at Nemours, and to 68° at La Calle. Severe frost all day over central Europe and Denmark; maximum at Cracow only 12°.

Wind in morning mainly South-Easterly and light in force over all the western countries, North-Westerly over Finland, and North-Easterly over south-eastern Europe. A feeble cyclonic circulation off our south-west coasts, and another between Barcelona and the Balearic Isles. Latter movement becoming much more important by evening, but former dying out. No change of note over our area as a whole.

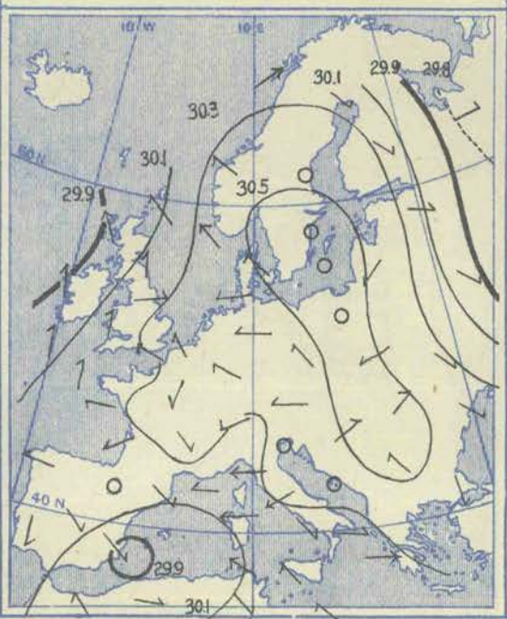
Barometer risen over the western countries, fallen somewhat elsewhere. Readings at 8 a.m. highest, 30·71 ins. at Cracow in the centre of a large anticyclone stretching from the north of Norway to Greece. Lowest, 30·0 ins. and less over the White Sea and its vicinity; below 30·1 ins. off our own south-west coasts and to the southward of Barcelona. Barometer falling decidedly over the north-east of Russia during day, and also over the east of Spain. Southern portion of anticyclone decreasing gradually in intensity.

Wednesday, 21st January, 1903.

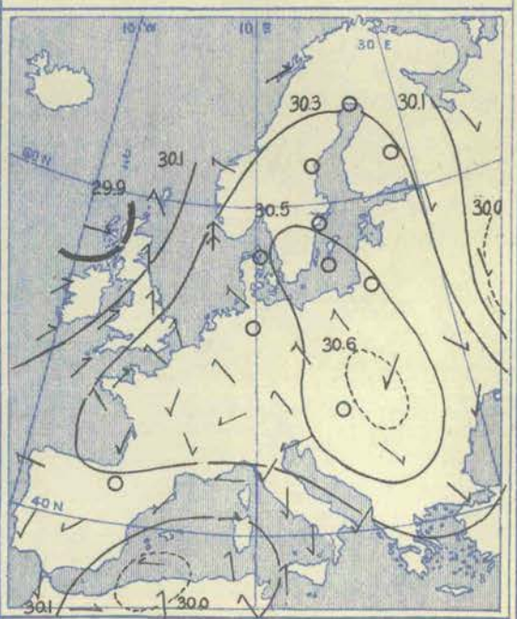
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull very generally, but fine and bright in Finland and at some Scandinavian stations. Misty or foggy over England and in some parts of central Europe, rain falling at Blacksod Point, Perpignan, and Bodö, and snow at Archangel, Moscow, Nicolaieff, and Buda-Pesth. About an inch of rain falling later in the south of Ireland, and smaller amounts over the west and north of our Islands generally. Considerable falls also experienced in Algeria and at Perpignan.

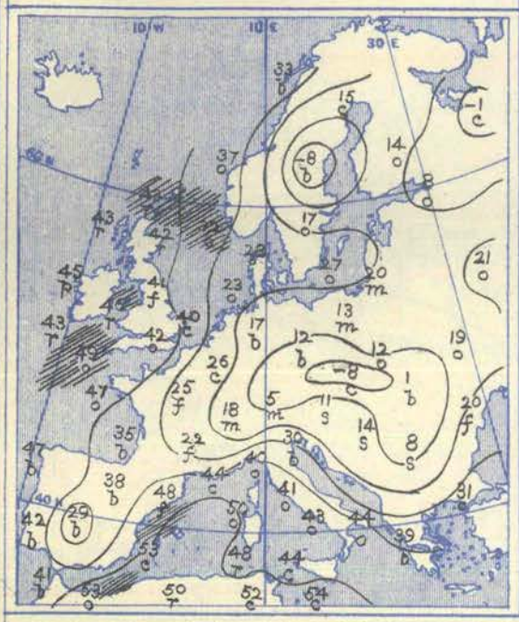
Temperature risen at most of our own and at some Italian stations, changed irregularly or fallen elsewhere. Readings at 8 a.m. ranging from 55° at Cagliari, 53° at Oran, and 49° at Scilly, to less than 40° in most parts of England, to 30° at Rome, 29° at Madrid, less than 20° over the central countries and most parts of Russia and Sweden, to 3° at Hernösand, −1° at Hermanstadt, and −6° at Cracow. Maxima during day as high as 53° at Scilly, 55° at Croisette, Lisbon, and Algiers, 57° at Palermo, and 59° at Nemours. Continuing much below freezing point over the northern and central regions of the Continent.

Wind at 8 a.m. light and anticyclonic over Europe as a whole, but a distinct cyclonic circulation of moderate or fresh breezes shown over Spain and the western portion of the Mediterranean, and a moderate Southerly gale prevailing on our own north-west coasts. Latter decreasing in force later in day, and wind over our Islands veering somewhat. Fresh gale from South setting in at Skudesnaes. No decided change elsewhere.

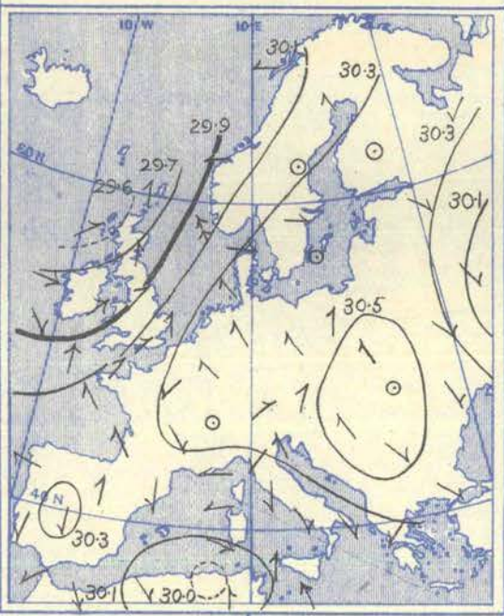
Barometer risen over Sweden, our southern districts, and the west and north of France; fallen elsewhere. 8 a.m. values ranging from 30·5 ins. to 30·6 ins. in a large elongated anticyclone stretching from Scandinavia to Transylvania, to 29·9 ins. and less in a small baric minima near Alicante, to about 29·9 ins. off our own north-west coasts, and to 29·77 ins. at Archangel. Depression off our north-west coasts moving north-eastwards during day, that near Alicante travelling south-eastwards, and that over the White Sea moving away eastwards. Anticyclone giving way on its northern side.

Thursday, 22nd January, 1903.

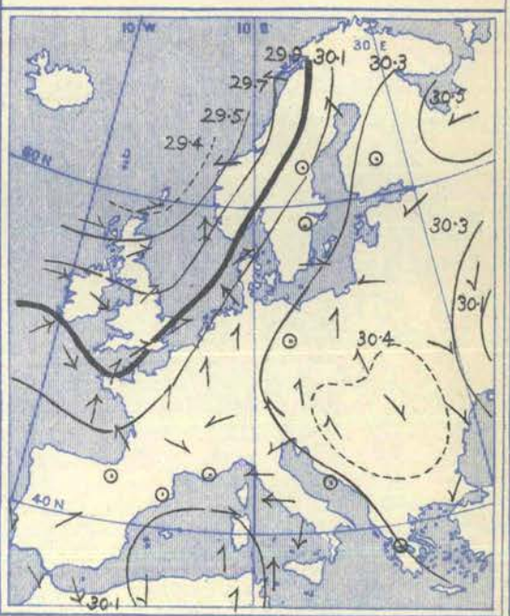
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull as a whole, but fine and bright over the Peninsula and the south and south-west of France. Rain very general over our own western and northern districts, and fog prevailing on our north-east coast. Rain falling at Cagliari and Algiers, and snow at Vienna, Buda-Pesth, and Hermanstadt. Rain extending to the west and north of France and our own southern and eastern districts later, and considerable amounts falling in Italy and Algiers—as much as 1·5 ins. at Rome.

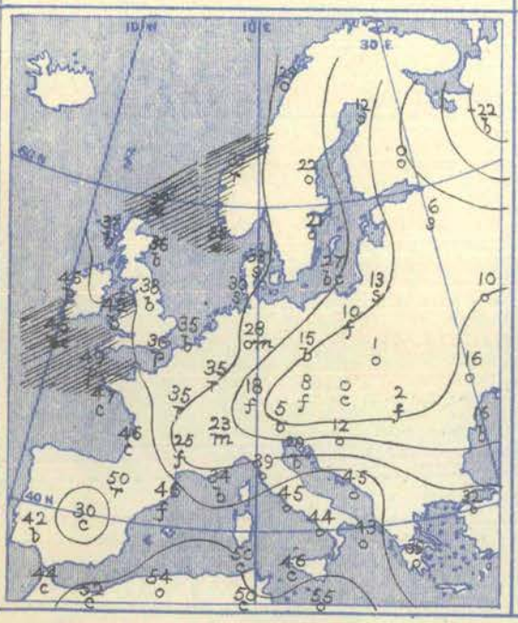
Temperature changed rather irregularly. Readings at 8 a.m. highest, 54° at Malta, 53° at Palma, 50° at Sanguinaire, 49° in the Scilly Isles. Lowest, (1) −8° at Cracow, +5° at Breslau and Munich; (2) −8° at Hernösand, −1° at Archangel; (3) 29° at Madrid; (4) 39° at Athens and Patras. Rising later to 52° at Scilly, 50° at Cagliari, Nemours, Tunis, and to 62° at Palermo. Maxima extremely low in the central and northern regions—that at Cracow was no higher than 5°.

Wind at 8 a.m. Southerly over our Islands generally, and also over the adjacent parts of the Continent, but North-Westerly or Westerly in the west and south of Ireland. Strong on our west coasts, and strong to a gale in the south-west of Norway. Light and variable over central Europe, light from the Northward over Russia, Greece, and Italy, and mainly cyclonic over Algeria and the neighbouring portion of the Mediterranean. Wind veering to North-West on all our west and south-west coasts by evening, and towards west in Scotland. No decided change elsewhere.

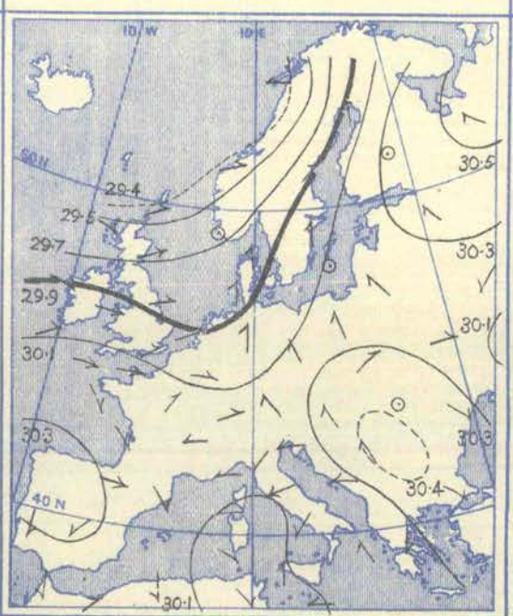
Barometer at 8 a.m. ranging from 30·4 ins. to 30·5 ins. and upwards in an anticyclone extending from Gothland to Turkey, and from above 30·3 ins. in a smaller system over Spain, to 30·0 ins. and less over central Russia, 29·98 ins. in a small disturbance near La Calle, to below 29·6 ins. in a "V"-shaped secondary over the south of Ireland, and to below 29·6 ins. in a large depression off the north-west of Scotland. Anticyclone decreasing both in size and intensity later; Scotch depression moving north-eastwards, and the secondary in Ireland travelling eastwards over our southern counties.

Friday, 23rd January, 1903.

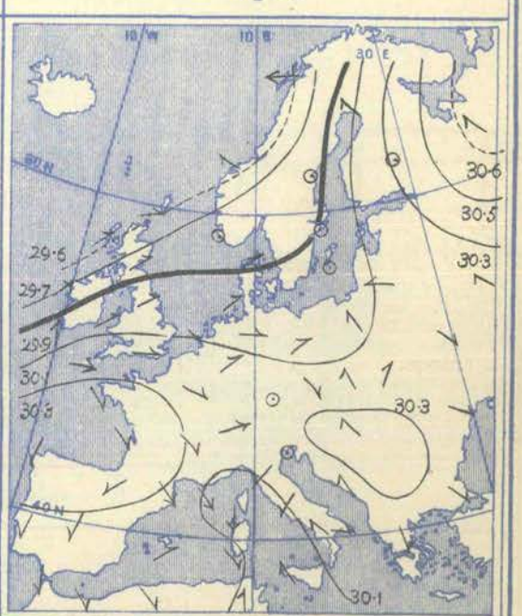
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull over the Continent, but fair or fine at nearly all our own stations. Rain falling at Bilbao, Brussels, and in several French localities, and rain or snow at Memel, St. Petersburg, and in some parts of Denmark and Scandinavia. Foggy or misty in the east of France and different parts of central Europe. Rain setting in later over our own western and north-western districts, and also in Italy and various parts of the Mediterranean—as much as 1·30 ins. at Naples, and 1·85 ins. at Malta.

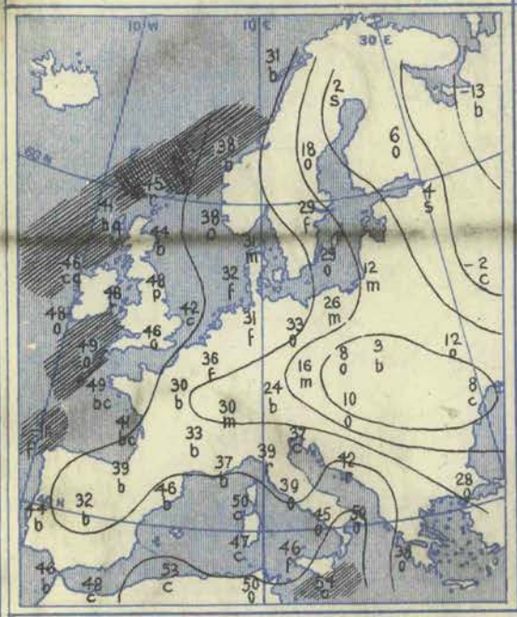
Temperature risen over France and at some stations in Scandinavia, fallen in most other regions. Readings at 8 a.m. highest, 55° at Malta, 54° at Algiers, 50° at Biarritz, 49° at Scilly. Lowest, −22° at Archangel, 0° (zero) at Kuopio and Warsaw, +5° at Munich, 10° at Moscow, 15° at Berlin, 30° at Madrid, 32° at Constantinople, and between 35° and 38° over the eastern half of Great Britain. Rising during day to 52° at Scilly and Jersey, 53° at Perpignan, 59° at Palma and San Fernando, 63° at Oran, and 64° at Palermo and La Calle. Remaining very low over Russia and the central countries. Maximum at Vienna, 10°.

Wind in morning light and anticyclonic (1) over northern Russia, (2) over central Europe, (3) over the Peninsula. Cyclonic over the whole of north-western Europe, the Westerly current being fresh or strong on our western coasts, and the Easterly wind strong at Bodö. Another cyclonic movement of light to fresh winds over Italy and its neighbourhood. No great change as a whole during day, but wind backing to South-West and increasing in force in Ireland.

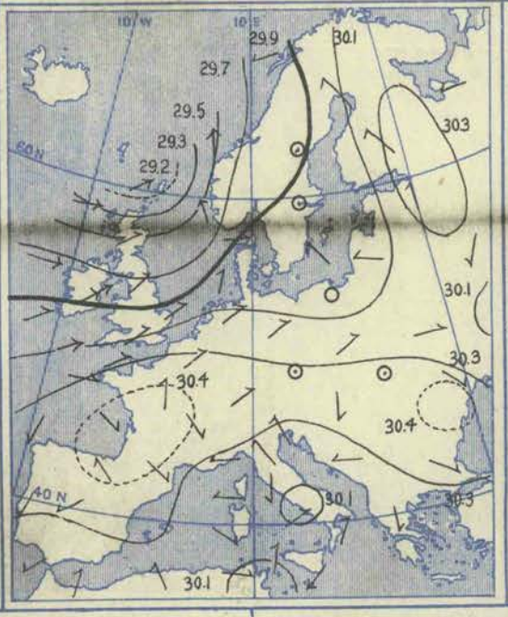
Barometer risen over central and northern Russia and over our western districts; fallen elsewhere. Readings at 8 a.m. ranging from 30·5 ins. and upwards in an anticyclone in the neighbourhood of the White Sea, 30·3 ins. to above 30·4 ins. in another system extending from Asia Minor to central Europe, and above 30·3 ins. in a third over the northern half of the Iberian Peninsula. Barometer falling again on our western coasts later, and also within the central anticyclone. Spanish high-pressure area extending northwards, and that in extreme north increasing in intensity.

Saturday, 24th January, 1903.

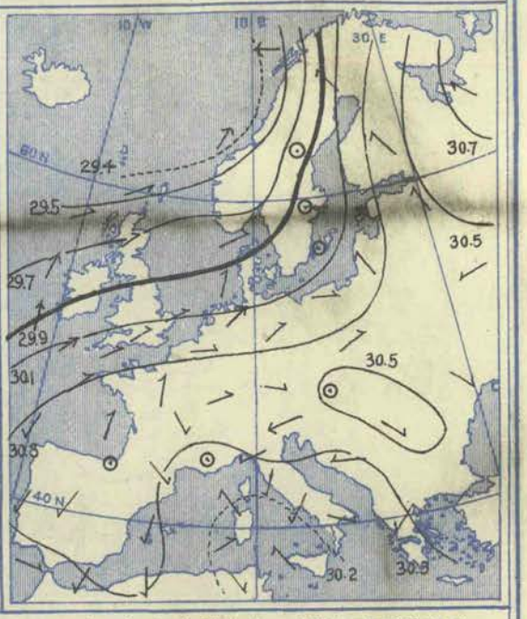
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in several parts of France and Spain, but cloudy or dull in almost all other regions. Foggy at Stockholm, over Denmark, western Germany, and on the north-west coasts of the Peninsula, and rainy in most parts of our Islands, and also at Lésina. Snow falling at Breslau, Hangö, and St. Petersburg. Rain setting in later at several Italian and Algerian stations, and rain or snow over Scandinavia.

Temperature risen in most places, but fallen in the north of Sweden, and in various parts of southern Europe. Readings at 8 a.m. highest, 55° at Alicante, 54° at Malta, 53° at Algiers, and 49° at Scilly and Roche's Point. Lowest, −13° at Archangel, −2° at Moscow, +2° at Haparanda, 3° at Lemburg, 5° at Vienna, 8° at Cracow and Odessa, 24° at Munich and Turin, 28° at Constantinople, 32° at Florence and Madrid, and 34° at Athens. Rising subsequently to 50° and upwards in many parts of our Islands and the west and south of France, to 59° at Cagliari, and to 68° at Palermo and on the coast of Algeria.

Wind cyclonic over the north-western countries, the South-Westerly and Westerly wind on our western and northern coasts being strong to a gale in force. Another cyclonic circulation of little strength shown over Italy and the Mediterranean. Light anticyclonic airs prevailing elsewhere. Wind decreasing somewhat in force over our western and northern districts later. No other important change.

Barometer at 8 a.m. ranging from 30·3 ins. to 30·4 ins., and upwards, in a large area extending from the Bay of Biscay to the Black Sea, and above 30·3 ins. in a separate area over northern Russia, to 30·07 ins. at Naples, 30·04 ins. at Kharkov, and to 29·13 ins. in the Shetlands. Anticyclonic systems increasing in intensity during day, and cyclonic disturbance to the northward of our Islands moving north-eastwards towards the north of Scandinavia. Gradients becoming less steep over the United Kingdom, but steeper over Norway and Sweden.

IV.—GENERAL NOTES, etc.

During the earlier half of the week a large anticyclone extended from Scandinavia across central to south-eastern Europe, while a series of cyclonic disturbances of considerable size and depth travelled northwards or north-eastwards to the westward and north-westward of the United Kingdom. The winds were consequently from some Southerly or South-Easterly point in all the western countries, and occasionally fresh or strong in force, and Northerly in the far east. Over the western portion of the Mediterranean, where some separate disturbances existed, distinct cyclonic wind circulations were felt. Towards the end of the week the anticyclone became of less intensity and moved southwards and south-westwards, while another high-pressure area was at the same time formed over the extreme north of Russia. It thus came about that by the end of the period a very extensive area of high-pressure, having several maxima stretched from the Iberian Peninsula eastwards to the Black Sea, this being connected by a "col" to that in the far north. With this change in the position of the anticyclone the depressions took a more easterly course, gradients increased considerably in depth, and strong winds or gales from between South and West were experienced over the north-western regions generally. Temperature was mostly above the mean over our Islands and the Atlantic seaboard of Continental Europe, but remained very low elsewhere—especially over the central countries. Falls of rain were very common over the British Isles and the west and north of France, while the depressions in the Mediterranean occasionally brought a good deal of rain to the neighbouring countries. Over the more eastern and northern regions the weather was drier as a whole, although rain or snow fell at times over Scandinavia and the Baltic.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 14.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	7·0	− 0·5	14	− 1
STRATHPEFFER SPA	9·6	+ 1·0	19	+ 2
EDINBURGH	4·1	− 4·2	8	− 8
COCKLE PARK	8·7	—	16	—
NEWCASTLE-ON-TYNE	4·3	—	8	—
YORK	—	—	—	—
CROMER	5·2	—	9	—
LOWESTOFT	4·1	—	7	—
HOLLESLEY BAY	5·2	—	9	—
DUNMOW	5·8	—	10	—
SHEFFIELD	2·6	—	5	—
WORKSOP	2·8	− 6·2	5	− 11
THURCASTON	4·6	− 5·1	8	− 9
MARGATE	6·5	− 4·7	11	− 8
BROADSTAIRS	7·8	—	13	—
RAMSGATE	—	—	—	—
EASTBOURNE	—	—	—	—
BRIGHTON	6·7	− 5·7	11	− 10
WORTHING	6·3	—	11	—
BOGNOR	5·6†	—	9†	—
WATERGATE PARK	7·3	—	12	—
WESTBOURNE	6·7†	— 6·7	11†	− 11
VENTNOR HOSPITAL	6·2	− 6·0	10	− 10
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	5·4	— 5·6	9	− 10
SOUTHPORT	9·9	—	18	—
RHYL	14·8	—	26	—
COLWYN BAY	—	—	—	—
ABERDOVEY	13·7†	—	24†	—
TENBY	5·4	− 9·1	9	− 16
TORQUAY	6·3	− 7·6	11	− 13
NEWQUAY	10·2	− 2·8	17	− 5
GUERNSEY	7·2†	− 6·1	12†	− 10

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

Date of Report.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Jan. 17th, 1903.	Sheffield	—	—	—	—	—	—	—	—	—	—	—	7·5	—	14	—
" " " " "	Newquay	—	—	—	—	—	—	—	—	—	—	—	12·4	+ 0·6	21	+ 1

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 4.] *Fourth Series.* WEEK ENDING SATURDAY, JANUARY 31ST, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 20.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	52	33	47·3	38·0	42·8	5 above	22	+15	11	−25	23	− 2	158	+ 12
	1. SCOTLAND, EAST	55	32	48·2	39·3	44·0	7 above	25	+17	8	−34	25	− 4	179	+ 9
	2. ENGLAND, N.E.	56	28	49·5	40·4	45·1	7 above	28	+20	4	−32	39	+ 10	132	− 16
	3. ENGLAND, EAST	55	36	49·3	41·5	45·6	8 above	27	+18	1	−39	58	+ 26	113	− 52
	4. MIDLAND COUNTIES	55	33	49·3	41·7	45·7	8 above	27	+16	1	−40	54	+ 15	143	− 27
	5. ENGLAND, SOUTH	53	37	48·7	42·9	45·9	6 above	27	+14	0	−31	71	+ 23	93	− 37
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	55	37	48·7	42·5	45·7	6 above	26	+17	0	−30	34	− 6	129*	+ 7
	7. ENGLAND, N.W.	56	35	49·4	42·7	46·2	7 above	29	+19	0	−29	58	+ 20	120	0
	8. ENGLAND, S.W.	54	37	49·9	44·1	47·1	6 above	36	+20	0	−23	90	+ 28	75	− 19
	9. IRELAND, NORTH	53	35	49·2	41·7	45·6	5 above	26	+12	1	−25	40	− 13	114	+ 8
	10. IRELAND, SOUTH	56	30	50·5	43·5	47·2	5 above	36	+15	0	−19	85	+ 3	67	− 14
	— CHANNEL ISLANDS	56	40	51·7	45·5	48·7	5 above	47	+23	0	−10	136	+ 42	31	− 11

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 20.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	42	30 more	18	− 1	7·3	+ 2·4	4	− 5	7	−10	25	− 2	12	− 1
	1. SCOTLAND, EAST	6	14	8 more	17	+ 2	3·9	+ 1·4	7	− 6	12	−10	26	− 15	12	− 7
	2. ENGLAND, N.E.	3	1	3 less	16	+ 2	2·0	+ 0·3	8	− 5	14	− 9	33*	− 5	15	− 2
	3. ENGLAND, EAST	2	3	1 less	13	− 3	1·4	− 0·3	13	− 1	21	− 2	49	+ 3	22	+ 1
	4. MIDLAND COUNTIES	3	3	2 less	14	− 1	1·9	− 0·2	7	− 4	12	− 7	39	+ 2	17	+ 1
	5. ENGLAND, SOUTH	4	5	0 (average)	17	+ 2	2·0	− 0·3	14	+ 1	23	+ 1	45	− 1	19	0
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	21	10 more	17	− 1	6·3	+ 1·6	2	− 9	3	−16	18	− 18	8	− 8
	7. ENGLAND, N.W.	4	9	3 more	17	+ 1	3·3	+ 0·6	7	− 4	11	− 7	43	+ 7	19	+ 3
	8. ENGLAND, S.W.	6	12	3 more	18	0	4·4	+ 0·8	10	− 5	16	− 8	43	− 8	18	− 3
	9. IRELAND, NORTH	6	8	1 more	19	0	4·4	+ 1·4	9	− 3	16	− 6	40	− 3	18	− 1
	10. IRELAND, SOUTH	5	9	0 (average)	21	+ 3	5·2	+ 1·4	11	− 3	19	− 6	42	− 10	19	− 4
	— CHANNEL ISLANDS	6	8	1 more	22	+ 4	3·2	+ 0·2	18	+ 1	28	+ 1	52	− 6	22	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period was again of a very unsettled character generally, but while over the greater part of England it was generally fair and dry, in Ireland, Scotland, and the most western and north-western districts of England rain was of almost daily occurrence, and at many stations in the north-west of Scotland was exceedingly heavy. Thunder and lightning were experienced in many parts of Scotland—chiefly during the earlier days of the week.

Temperature was above the mean, the excess ranging from 5° in Ireland, the Channel Islands, and Scotland N., to 6° or 7° in most other regions, and to as much as 8° in the Midland Counties and England E. The highest of the maxima were recorded, as a rule, during the earlier part of the week, and ranged from 52° in Scotland N., and 53° in England S. and Ireland N., to 55° or 56° in nearly all other districts. The lowest of the minima, which occurred either on the 28th or 29th, varied from 28° in England N.E., and 30° in Ireland S., to 37° in England S. and S.W. and Scotland W., and to 40° in the Channel Islands.

Rainfall was less than the mean over all the eastern and central parts of England, and only equal to it in England S. and Ireland S. In all other districts, however, there was an excess, that in Scotland W. and E. being large, and that in Scotland N. abnormal. The following are some of the largest falls in the last-named district,—3·15 ins. and 2·14 ins. at Glencarron on Thursday and Friday; 2·11 ins. and 1·50 ins. at Fort Augustus on the same days; and 1·58 ins., 2·16 ins., and 1·82 ins. at Fort William on Sunday, Thursday, and Friday. Falls of more than an inch occurred also over the north-west of England; at Aysgarth and Stonyhurst on Tuesday morning 1·66 ins. and 1·30 ins. respectively was measured.

Bright Sunshine was deficient in all districts except England S. and the Channel Islands. The percentages ranged from 28 in the latter district, 23 in the former, and 21 in England E., to 11 in England N.W., 7 in Scotland N., and 3 in Scotland W.

Barometer and Wind.—The distribution of pressure over our Islands and their neighbourhood was very simple during the whole period, an anticyclone existing over France and sometimes extending to the Bay of Biscay, while the centres of cyclonic disturbances, often of great size and depth, moved in a general north-easterly direction outside our western and northern coasts on to northern Europe. The series culminated in a very deep "V"-shaped disturbance, the centre of which moved eastward over the north of Scotland on the night of the 31st. The winds consequently varied between South and West in direction and blew very strongly, with frequent gales in the west and north-west. The "V"-shaped system of Saturday, after bringing very severe South and South-West gales to all our southern and western districts, subsequently caused North-Westerly gales of almost equal strength in the extreme north-west, and south-west.

207 | 90 Wy & S, Ltd
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 19 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	49	34	46·0	37·1	41·7	+ 2·8	11	21	7	1·97	+ 1·15	*	*	*	*
	Stornoway	52	35	49·0	37·6	43·5	+ 4·6	29	12	7	2·36	+ 1·32	2·7	- 7·1	5	- 13
	Wick	48	33	45·6	35·9	40·9	+ 3·2	10	25	6	0·78	+ 0·30	*	*	*	
	Lairg Ⓢ	51	34	46·4	36·7	41·7	+ 6·3	12	23	7	2·46	+ 1·68	*	*	*	*
	Glencarron Ⓢ	52	34	47·7	37·7	42·9	+ 5·6	24	12	7	8·38	+ 6·40	*	*	*	*
	Fort Augustus Ⓢ	50	36	47·4	39·4	43·6	+ 5·6	22	7	7	6·00	+ 4·98	1·2	- 5·2	2	- 9
	Fort William	51	38	49·0	41·9	45·6	+ 6·7	26	9	7	7·36	+ 5·34	0·0	- 8·7	0	- 16
1. SCOTLAND E.	Nairn	52	35	48·7	38·4	43·8	+ 6·4	28	10	7	1·79	+ 1·39	*	*	*	*
	Aberdeen	54	37	49·4	39·6	44·7	+ 6·9	29	7	4	1·06	+ 0·53	12·6	- 2·0	23	- 4
	Braemar Ⓢ	47	33	44·7	37·6	41·3	+ 6·7	8	18	7	2·17	+ 1·50	*	*	*	*
	Ochtertyre Ⓢ	49	32	47·1	39·0	43·2	+ 5·9	21	8	7	2·09	+ 1·07	*	*	*	*
	Leith	55	39	50·6	42·4	46·7	+ 7·4	33	0	6	0·83	+ 0·45	*	*	*	*
	Marchmont Ⓢ	51	36	48·7	39·0	44·0	+ 7·2	27	8	4	0·53	- 0·07	4·0	- 8·5	7	- 15
2. ENGLAND, N.E.	Alnwick Castle	54	35	49·0	41·0	45·2	+ 7·3	27	3	3	0·15	- 0·36	*	*	*	*
	Durham	53	28	49·1	36·6	43·1	+ 5·8	30	15	2	0·06	- 0·35	9·3	- 3·4	16	- 6
	Shields	56	40	51·1	43·0	47·2	+ 8·6	36	0	3	0·07	- 0·30	*	*	*	*
	Scarborough Ⓜ	54	38	50·4	39·7	45·3	+ 6·8	33	6	4	0·06	- 0·37	7·0	—	12	—
	Spurn Head	53	38	48·7	41·0	45·0	+ 6·6	25	3	2	0·08	- 0·21	*	*	*	*
	Fulbeck (Lincolnshire)	53	37	48·6	40·9	44·9	+ 8·0	25	3	2	0·06	- 0·31	12·1	—	20	—
3. ENGLAND, E.	Hillington Ⓜ	54	37	49·3	41·1	45·4	+ 7·9	28	3	1	0·41	- 0·03	? 11·6	- 1·6	? 19	- 3
	Yarmouth	54	39	49·0	41·6	45·5	+ 7·8	26	1	2	0·22	- 0·20	*	*	*	*
	Geldeston	55	39	49·9	42·5	46·4	+ 7·9	31	0	2	0·19	- 0·16	14·8	+ 0·5	25	+ 1
	Cambridge	55	36	50·8	41·4	46·3	+ 8·3	33	2	2	0·45	+ 0·12	13·5	- 0·3	22	- 1
	Felixstowe	51	37	48·1	40·5	44·5	+ 5·9	24	4	3	0·24	—	17·3†	—	29†	—
	Rothamsted	51	38	48·7	41·7	45·3	+ 7·7	24	1	3	0·63	+ 0·13	9·2	- 3·6	15	- 6
	Shoeburyness	50	39	49·1	42·0	45·7	+ 6·9	26	0	2	0·20	—	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	52	37	47·9	41·7	44·9	+ 7·6	22	1	5	0·24	- 0·34	3·0	—	5	—
	Bawtry (Hesley Hall)	55	38	50·3	42·7	46·7	+ 8·8	33	0	2	0·08	- 0·32	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	53	36	50·0	41·0	45·7	+ 8·0	30	3	3	0·33	- 0·11	*	*	*	*
	Cheadle Ⓜ	51	33	48·5	40·1	44·5	+ 7·6	25	5	4	0·21	— 0·36	*	*	*	*
	Birmingham (Edgbaston)	52	36	48·6	41·6	45·2	+ 6·8	24	1	2	0·37	- 0·10	5·3	—	9	—
	Churchstoke Ⓜ	52	35	49·1	41·5	45·5	+ 7·6	27	1	5	0·43	- 0·17	10·8	- 2·9	18	- 5
	Hereford Ⓜ	53	40	50·2	44·0	47·2	+ 8·2	36	0	3	0·36	- 0·18	*	*	*	*
	Cirencester	53	35	49·2	40·1	44·8	+ 6·9	28	5	4	0·53	- 0·10	6·3	- 7·4	10	- 12
	Oxford	54	39	49·9	43·0	46·6	+ 7·8	32	0	2	0·27	- 0·16	8·0	- 4·7	13	- 8
5. ENGLAND, S.	London	53	39	50·3	42·7	46·7	+ 7·3	33	0	3	0·60	+ 0·17	9·0‡	+ 1·7‡	15‡	+ 3‡
	Swarraton (Alresford) Ⓜ	50	37	48·4	41·6	45·1	+ 7·1	23	1	5	0·91	+ 0·24	*	*	*	*
	Dungeness	49	41	48·6	43·3	46·1	+ 6·6	29	0	4	0·13	- 0·24	19·4	—	31	—
	Hastings (St. Leonards)	50	39	48·5	42·9	45·8	+ 6·1	27	0	5	0·17	- 0·40	22·4	+ 6·3	36	+ 10
	Southampton	52	39	50·4	44·0	47·3	+ 7·1	37	0	3	0·68	+ 0·02	10·2	- 4·0	17	- 7
	Portland Bill	51	42	48·7	44·7	46·8	+ 5·0	34	0	7	0·39	—	*	*	*	*
	Shaftesbury Ⓜ	48	37	46·3	41·1	43·8	+ 5·7	16	3	3	0·84	+ 0·18	*	*	*	*
6. SCOTLAND, W	Laudale (Loch Sunart)	55	37	50·5	41·1	46·0	+ 6·1	32	3	7	3·78	+ 2·02	*	*	*	*
	Glasgow	52	40	48·1	42·1	45·2	+ 6·5	22	0	7	2·37	+ 1·54	0·6	- 7·2	1	- 13
	Cally Ⓢ	50	39	47·7	42·4	45·2	+ 6·6	22	0	3	0·92	- 0·11	*	*	*	*
	Douglas (Isle of Man)	52	42	48·6	44·3	46·5	+ 5·9	32	0	4	1·23	+ 0·33	2·8	- 11·2	5	- 19
7. ENGLAND N W.	Newton Reigny	52	35	47·1	41·0	44·2	+ 8·2	20	3	7	1·71	—	0·9	—	2	—
	Stonyhurst	51	38	47·5	41·8	44·8	+ 6·8	20	1	3	1·74	+ 0·87	2·5	- 8·0	4	- 14
	Blackpool Ⓜ	53	41	48·7	42·5	45·7	+ 7·0	26	0	4	0·48	- 0·13	5·1	- 6·1	9	- 10
	Manchester (Prestwich)	55	36	49·4	42·5	46·1	+ 7·6	29	0	3	0·42	- 0·22	2·1	—	4	—
	Liverpool Obsy. (Bidston)	54	39	50·1	43·0	46·7	+ 7·2	33	0	2	0·18	- 0·28	11·7	—	20	—
	Chester (Hawarden Bridge)	56	39	52·0	42·6	47·5	+ 7·4	39	0	3	0·25	—	*	*	*	*
	Llandudno Ⓜ	56	42	51·7	44·8	48·4	+ 6·8	45	0	4	1·02	+ 0·45	15·4	+ 2·1	26	+ 4
	Holyhead	50	41	48·3	43·6	46·0	+ 4·2	28	0	3	1·29	+ 0·62	*	*	*	*
8. ENGLAND, S W.	Llandovery	—	—	—	—	—	—	—	—	7	2·36	+ 1·00	*	*	*	*
	Pembroke	51	44	48·7	44·9	46·9	+ 4·5	34	0	6	0·66	- 0·10	11·7	- 3·3	19	- 6
	Clifton	53	41	50·2	44·2	47·3	+ 7·3	37	0	5	0·68	- 0·04	*	*	*	*
	Bath	54	37	51·0	44·1	47·7	+ 7·1	40	0	5	0·81	+ 0·18	9·0	—	15	—
	Arlington (N. Devon)	50	38	48·6	42·4	45·6	+ 5·1	25	0	7	1·72	+ 0·71	*	*	*	*
	Cullompton Ⓜ	53	37	50·5	43·0	46·9	+ 6·6	34	0	5	0·75	+ 0·02	4·8	- 8·0	8	- 13
	Falmouth	52	42	50·5	44·9	47·8	+ 4·2	41	0	7	1·36	+ 0·29	13·7	- 1·9	22	- 3
	Plymouth	51	42	50·1	45·1	47·7	+ 5·3	40	0	6	1·40	+ 0·59	9·7	- 5·0	16	- 8
9 IRELAND, N.	Malin Head	51	39	47·9	42·3	45·2	+ 3·5	22	0	7	0·73	+ 0·19	*	*	*	*
	Edenfel (Omagh	53	35	48·4	40·4	44·6	+ 6·3	25	4	6	1·22	+ 0·50	*	*	*	*
	Blacksod Point	53	38	49·6	42·1	46·0	+ 3·2	28	0	7	1·03	+ 0·04	*	*	*	*
	Markree Castle	53	38	49·8	41·9	46·0	+ 6·1	28	0	6	1·09	+ 0·31	10·0	- 2·2	17	- 4
	Armagh	53	36	49·7	41·3	45·7	+ 6·2	29	2	4	0·48	- 0·09	8·4	- 4·3	14	- 7
	Donaghadee	53	37	50·0	42·0	46·2	+ 5·6	29	0	4	0·40	- 0·20	*	*	*	*
10. IRELAND, S.	Dublin	56	39	52·0	44·6	48·5	+ 6·5	46	0	2	0·38	- 0·09	15·0	- 0·1	25	0
	Parsonstown	55	37	49·9	42·1	46·2	+ 6·0	29	0	5	0·44	- 0·17	12·4	- 1·3	21	- 2
	Kilkenny	55	35	50·4	42·0	46·4	+ 5·1	31	0	4	0·77	+ 0·07	*	*	*	*
	Waterford	55	30	49·7	40·9	45·5	+ 3·3	29	3	4	0·88	- 0·05	*	*	*	*
	Roche's Point	53	40	49·9	45·3	47·7	+ 4·2	40	0	7	1·11	+ 0·01	*	*	*	*
	Valencia	54	42	50·7	45·6	48·3	+ 3·7	44	0	7	1·23	- 0·10	6·2	- 8·5	10	- 14
	Killarney	55	41	51·8	44·9	48·5	+ 5·2	46	0	6	1·86	+ 0·51	*	*	*	*
	Foynes	53	38	49·7	42·5	46·2	+ 4·3	29	0	4	0·71	- 0·06	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	45	52·0	47·3	49·7	+ 4·0	54	0	6	1·19	+ 0·45	15·7	- 1·1	25	- 2
	Jersey	56	40	51·3	43·7	47·7	+ 5·1	40	0	6	0·34	- 0·32	20·4	+ 2·8	32	+ 4

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

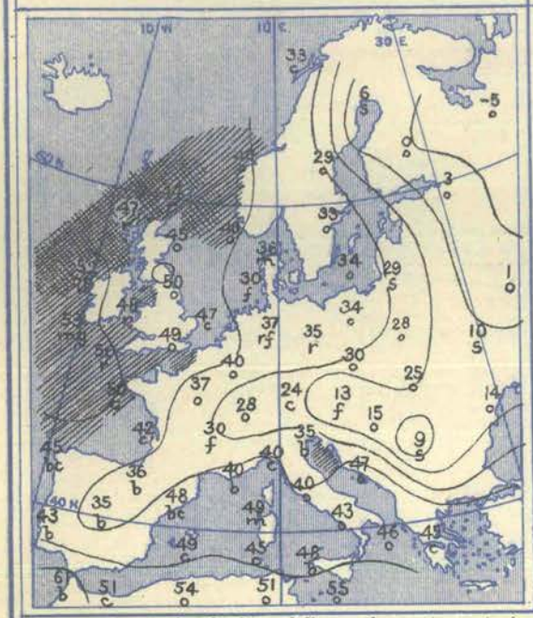
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster. For additional Reports of Sunshine, see last page.

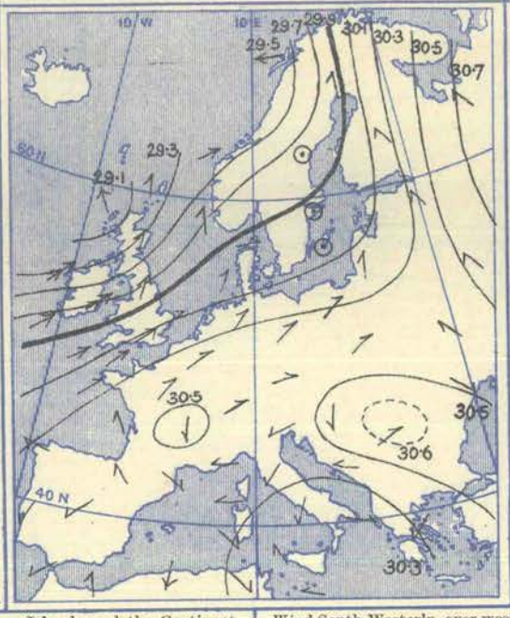
Note.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 25th January, 1903.

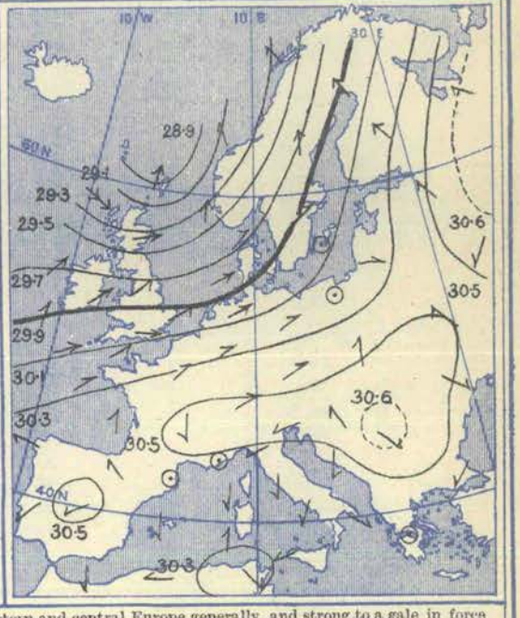
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over the greater part of our Islands and the Continent, with fog in several parts of Denmark, Germany, Austria, and central France; rain or passing showers reported at many of our own western and southern stations, and also in North Germany; snow falling in Lapland, as well as at Kiev and Hermanstadt. Fine in the east of Scotland, and also over the Spanish Peninsula and the extreme south of France. Rain occurring later in most parts of north-western Europe, and snow in Sweden, Denmark, and Austria; sky clearing in Italy.

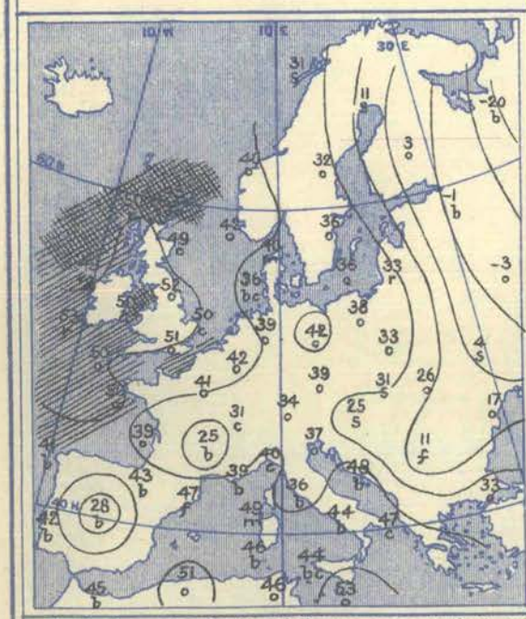
Temperature risen in most places. Maxima readings highest, (1) 61° at San Fernando, 55° at Malta, and 54° at Algiers; (2) 53° at Valencia, 52° at Blacksod Point, and 51° at Parsonstown and Roche's Point; above 45° in nearly all parts of the United Kingdom. Lowest, −5° at Archangel, 0° (zero) at Kuopio and Helsingfors, and 1° at Moscow; considerably below the freezing point over the whole of Russia and Austria, and slightly below it in south Germany and central France. Rising during day to 50° and upwards over the United Kingdom generally, and to 55° at Parsonstown, exceeding 55° at many of the Mediterranean stations.

Wind South-Westerly over western and central Europe generally, and strong to a gale in force on our own western coasts; light to moderate from the South-Eastward in Russia, North-Easterly over Italy, and the Spanish Peninsula; variable in the south of France. Subsequently veering to the North-Westward in the north of Scotland, and increasing to a gale in the Hebrides. Considerable increase of wind taking place from the Southward in Scandinavia, and from the South-Westward in Denmark.

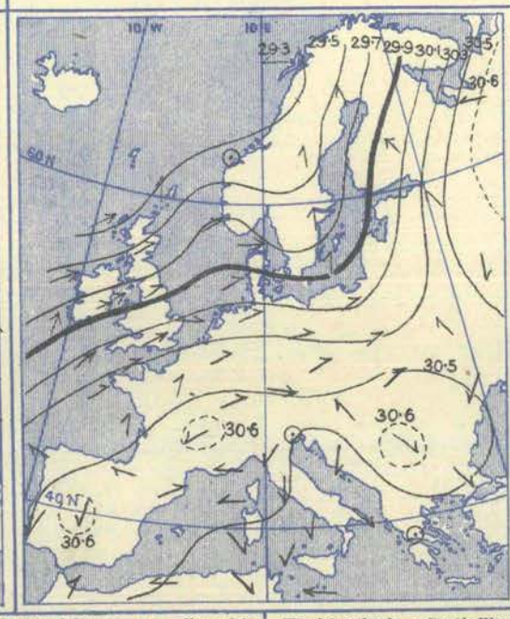
Barometer highest, 30·7 ins. and upwards, over northern Russia; 30·6 ins. and upwards over eastern Austria; 30·3 ins. and upwards in an anticyclone covering the greater part of eastern, central, and southern Europe. Lowest, 29·1 ins. and less in a well-marked cyclonic system, with its centre a little to the westward of the Hebrides; gradients steep over the west and north of our Islands, and the northern parts of the North Sea. Cyclonic disturbance subsequently moving north-eastwards; barometer rising briskly on our northern coasts, but beginning to fall again in west of Ireland at night.

Monday, 26th January, 1903.

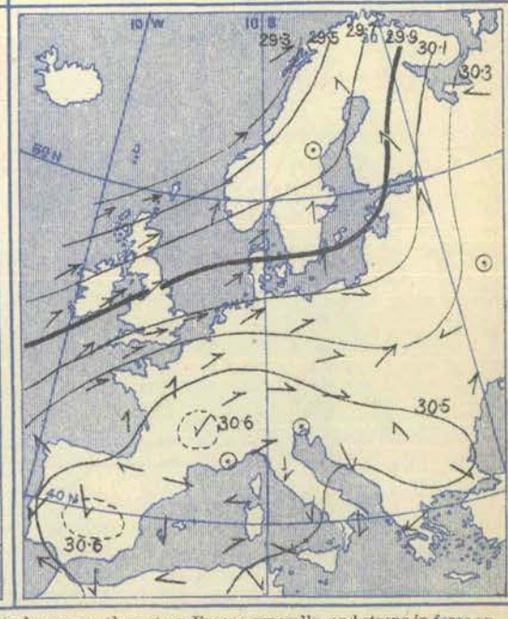
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over western, northern, and central Europe generally, with rain at several of the English and Irish stations, and also in the Shetlands and Hebrides; snow falling in Austria, and at Kiev, as well as in the extreme northern parts of Finland and Scandinavia. Fine in the north of Scotland and over southern Europe generally. Rain falling later in most parts of north-western Europe, and snow in Sweden, Russia, and Austria; lightning seen at night at Stornoway and Christiansund.

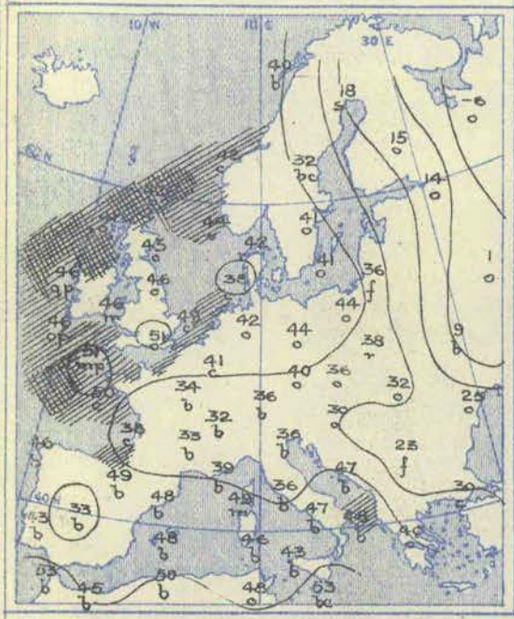
Temperature risen generally, but fallen over Spain, northern Italy, and the extreme south of France. Morning readings highest, 54° at Leith and Parsonstown, and 53° at Donaghadee and Valencia (Ireland); above 50° in nearly all parts of the United Kingdom, but below that point at most of the Mediterranean stations. Lowest, −20° at Archangel, −3° at Moscow, −1° at St. Petersburg, and +3° at Kuopio; considerably below the freezing point in nearly all parts of Russia, Austria, and the north of Sweden. Rising during day to 55° at Leith, and to 56° at Shields; exceeding 55° also over Spain and the extreme southern parts of France and Italy, and reaching 62° at Palermo.

Wind Southerly or South-Westerly over north-western Europe generally, and strong in force on most parts of our western and southern coasts, with a gale at Holyhead; South-Easterly over Russia and the north of Scandinavia. Light from the Northward over Italy and the Spanish Peninsula; Easterly or variable in the south of France. Blowing very strongly later from the South-Westward on the eastern shores of the North Sea; no important change occurring elsewhere.

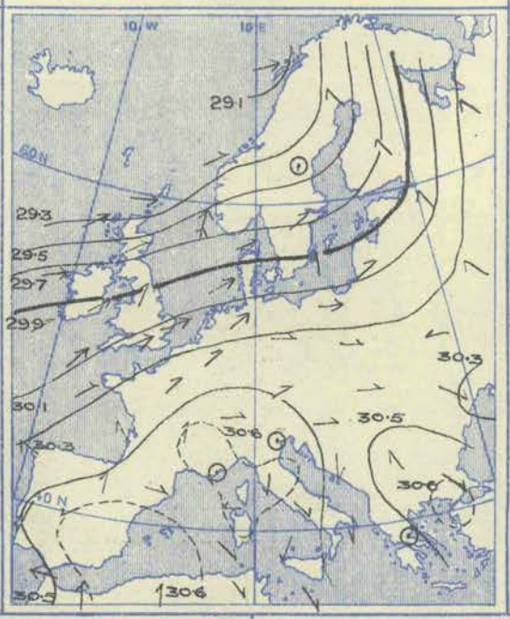
Barometer highest, 30·6 ins. and upwards to 30·8 ins. in an anticyclone lying over all but the north-western countries. Lowest, 29·3 ins. and less in two cyclonic areas, one lying off the north-west of Scotland, and the other off the west of Norway. Both systems moving north-eastwards later, and barometer rising slowly in all parts of the United Kingdom.

Tuesday, 27th January, 1903.

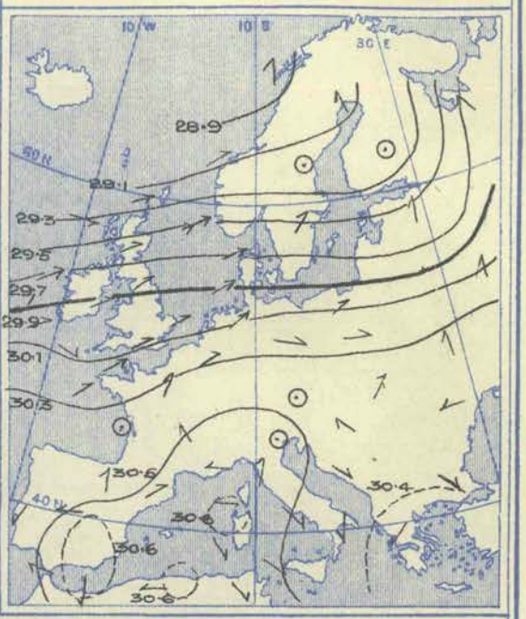
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy over the United Kingdom and the northern and central parts of the Continent, with rain in several isolated places, and snow in Lapland. Fine over France and southern Europe generally. Rain falling later in most of the north-western countries, and snow in many parts of Russia; thunder and lightning occurring at Sumburgh Head, and lightning seen at night at Blacksod Point.

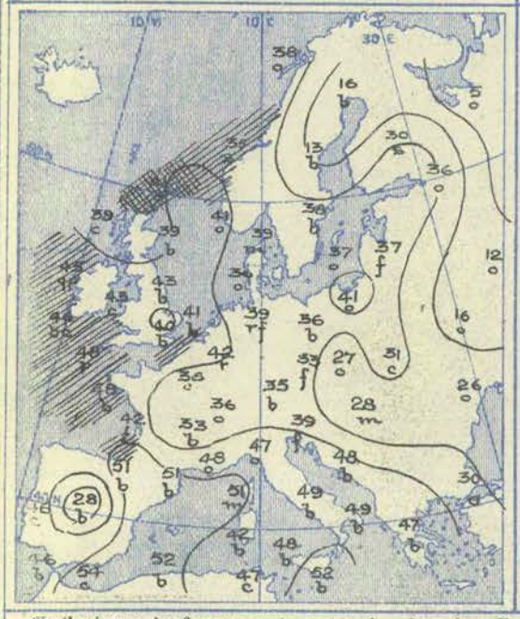
Temperature fallen in the western and northern parts of our Islands and France, but risen in most other localities. Morning readings highest, (1) 58° at Malta and 50° at Algiers; (2) 52° at Bath and Oxford, and 51° in London and at Scilly; above 45° in most parts of England and Ireland. Lowest, −6° at Archangel, +1° at Moscow, and 9° at Kiev; below the freezing point over nearly the whole of Russia and Austria, and also in some parts of central France. Rising during day to 50° and upwards at most of the English stations, and to 56° at Jersey; exceeding 55° also over Spain and the southern parts of France and Italy, and reaching 64° at Biarritz.

Wind South-Westerly over western, northern, and central Europe generally, and strong in force in many places, with a gale in the north of Ireland and the south of Norway; South-Easterly over the northern and central parts of Russia; variable over northern Italy and the south of France; Northerly over central and southern Italy; North-Easterly to Easterly over the Spanish Peninsula. No important change occurring during day.

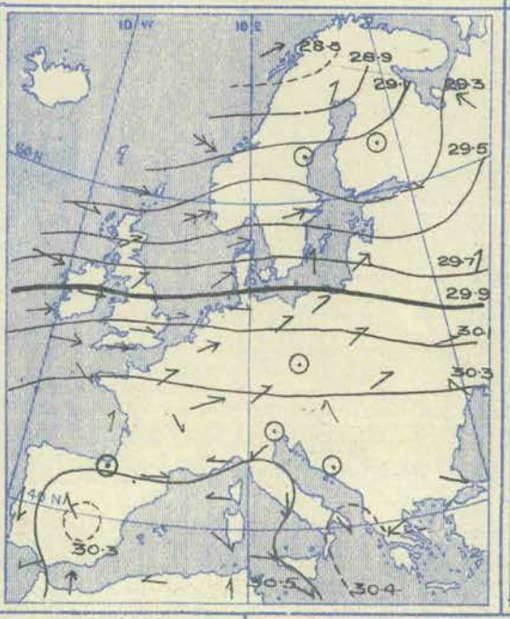
Barometer highest, 30·6 ins. and upwards to 30·3 ins. in an anticyclone lying over the whole of eastern, central, and southern Europe. Lowest, 29·2 ins. and less in a series of cyclonic disturbances moving along in a north-easterly direction to the northward of our Islands and passing across the north of Scandinavia. No decided change occurring during day; barometer rising slightly in most parts of the United Kingdom.

Wednesday, 28th January, 1903.

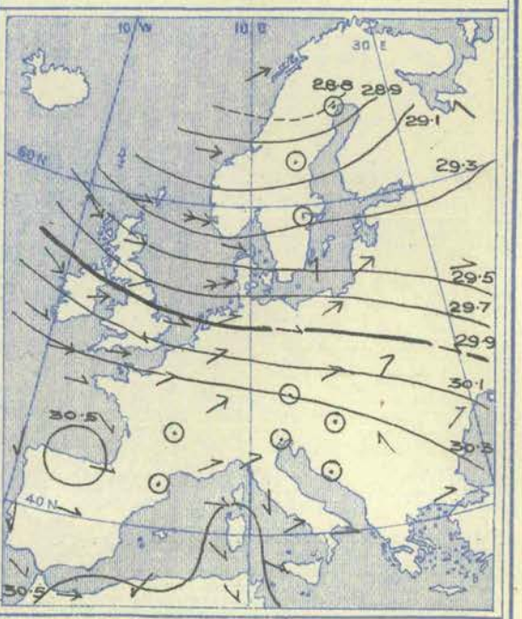
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over western, central, and southern Europe generally, but showery at several of our own western and northern stations, and rainy over north Germany and the Netherlands. Fine in Sweden, but dull in Norway, Denmark, and Russia, with rain at Hangö, and snow at Christiansund and Kuopio. Rain falling later in nearly all parts of north-western Europe, but quantity small as a rule; thunder and lightning occurring at Wick.

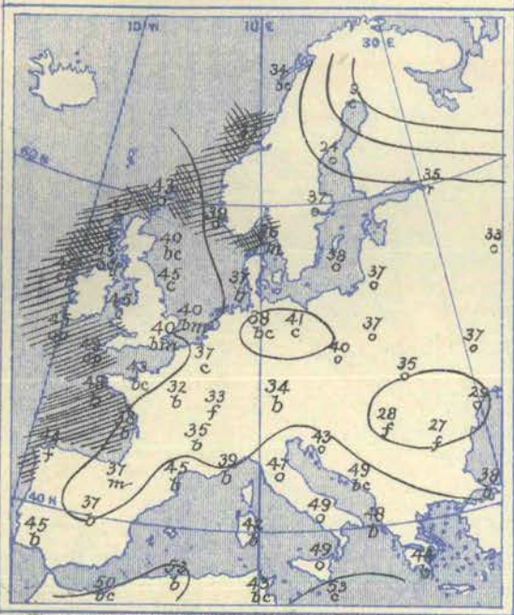
Temperature fallen generally, but risen in France, Italy, and Russia. Morning readings highest, 54° at Nemours, 52° at Algiers and Malta, and 51° at Barcelona; above 45° at most of the Mediterranean and Spanish coast stations, and also on our own extreme south-west coasts. Lowest, 5° at Archangel, 11° at Nicolaieff, 12° at Moscow, and 16° at Haparanda; below the freezing point over eastern Europe generally. Rising during day to 45° and upwards in all but the extreme northern parts of the Kingdom, and exceeding 50° in the Scilly and Channel Islands; exceeding 55° over southern Europe as a whole, and reaching 61° at Cape Béarn, and 62° at Palermo.

Wind Westerly or South-Westerly over all but the southern parts of Europe, and strong in force in many places, with a gale in the north of Ireland and the west of Norway. Light and variable over the Spanish Peninsula, northern Italy, and the south of France; Northerly (North-Easterly to North-Westerly) over Greece and southern Italy. Subsequently increasing to a slight gale from the Westward or North-Westward on several parts of our own north and north-west coasts; no important change occurring elsewhere.

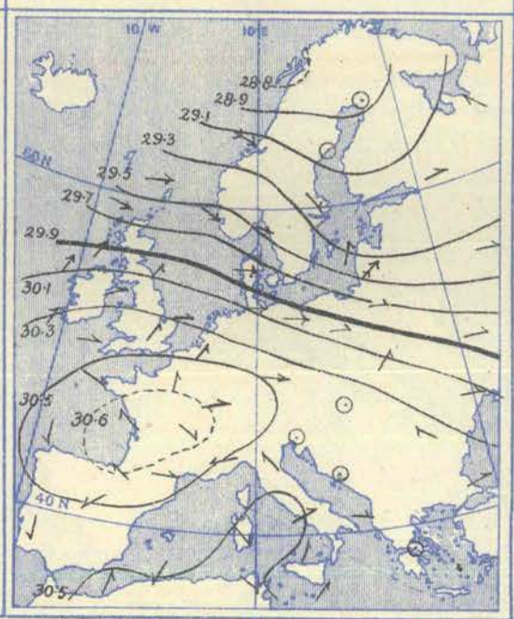
Barometer highest, 30·6 ins. and upwards over central Spain; 30·3 ins. and upwards in an anticyclone covering all the more southern parts of the Continent. Lowest, 28·8 ins. and less in a cyclonic area lying over the north of Scandinavia. Gradients rather steep over our Islands and the northern parts of Europe generally. No important change occurring later, but barometer rising in all parts of the United Kingdom—briskly on our extreme northern coasts.

Thursday, 29th January, 1903.

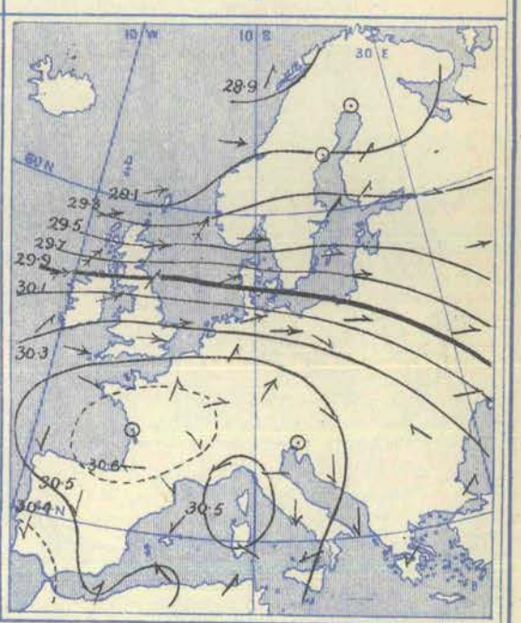
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over western and southern Europe generally, but dull in Ireland and the west and north of Scotland, with showers in the west of Ireland. Cloudy or dull in most of the northern and eastern countries, with rain at St. Petersburg and snow at Christiansund. Rain falling later in the west and north of our Islands generally, and also on the eastern shores of the North Sea; snow reported in several parts of Russia. Lightning seen at Christiansund at night.

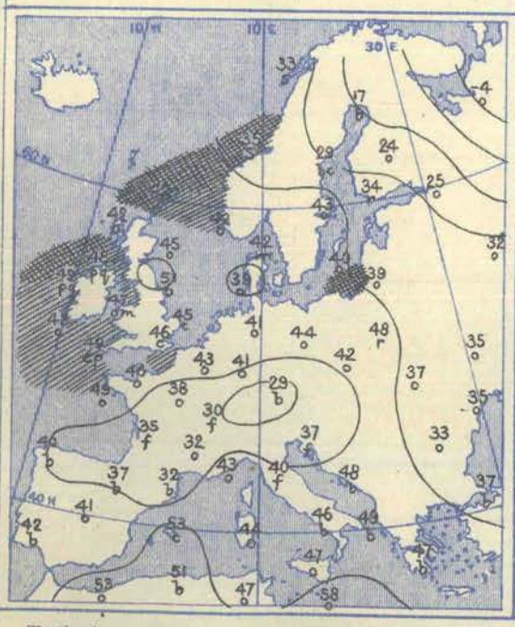
Temperature risen generally, but fallen in France and also over the Baltic and the south of Scandinavia. Morning readings highest, (1) 53° at Leghorn, Oran, Algiers, and Malta, and 50° at Nemours; (2) 49° at Scilly and 48° at Pembroke; above 45° on several parts of our own western and southern coasts. Lowest, −1° at Archangel, +9° at Haparanda, 23° at Nicolaieff, and 24° at Hernösand and Kharkov; slightly below the freezing point in some parts of central France. Rising during day to 50° or slightly above it in several parts of the United Kingdom; exceeding 60° at some of the Spanish and Mediterranean stations, and reaching 63° at San Fernando.

Wind South-Westerly or Westerly in our Islands and blowing a gale in the north of Ireland; strong from the Westward over northern Europe generally, with a gale in the west of Norway. Light to moderate from the Eastward or North-Eastward over the Spanish Peninsula, and from the South-Eastward in the south-west of France; variable in the south of France; light from the Westward at most of the Italian stations. Wind increasing in force over the north-western countries later, and a gale setting in to the eastward of the North Sea.

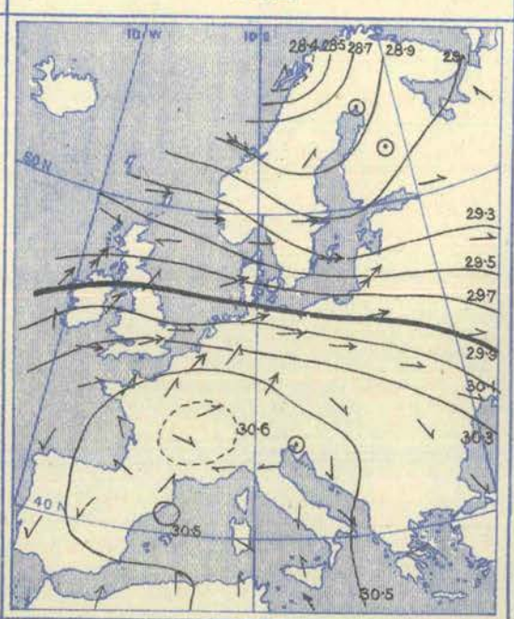
Barometer highest, 30·6 ins. and upwards over the greater part of France; 30·1 ins. and upwards in an anticyclone covering the whole of central and southern Europe, and extending northwards over the greater part of England and Ireland. Lowest, 28·8 ins. and less in a cyclonic system lying off the north-west of Norway. Gradients steep, or rather so, over the entire northern half of Europe. No great change as a whole during day, but another disturbance advancing towards our Islands, and gradients increasing over all the more northern regions.

Friday, 30th January, 1903.

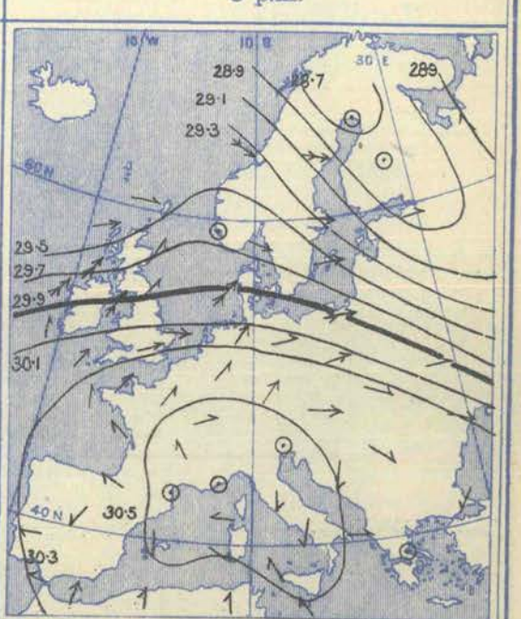
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy and unsettled over western, northern, and central Europe generally, with showers in many parts of the United Kingdom, rain at Hango and Warsaw, and snow in the west of Norway. Fine in all the southern countries. Rain falling later in the west and extreme north of our Islands, and also in Norway and Denmark, and snow at several of the Russian stations.

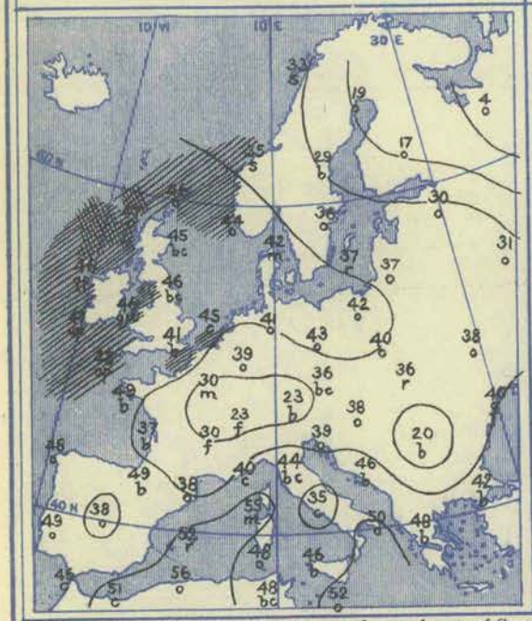
Temperature risen generally, but fallen slightly in the north of Scotland and the west of Norway, and to a greater extent over Italy and the south of France. Morning readings highest, (1) 58° at Malta, 54° at Sanguinaire, and 53° at Palma and Nemours; (2) 51° at Shields, and 50° at Leith; above 45° at nearly all the English and Irish stations. Rising during day to 50° and upwards in many parts of the United Kingdom; exceeding 55° over southern Europe generally, and reaching 62° at Palermo, and 61° at Malta.

Wind Westerly or South-Westerly over western, northern, and central Europe generally, and strong in force in many places; gale from the South-Westward reported over the Irish Sea and the north of Ireland, and from the Westward over the Baltic and the west of Norway. Light to moderate from the Eastward or North-Eastward over the Spanish Peninsula, variable in Italy and the south of France. Subsequently increasing to a gale from West in Sweden; no important change occurring elsewhere.

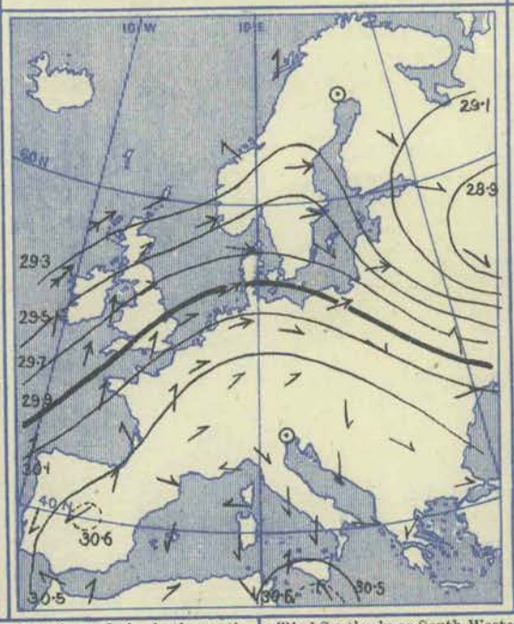
Barometer highest, 30·6 ins. and upwards over central France; 30·4 ins. and upwards in an anticyclone covering the whole of central and southern Europe. Lowest, 28·4 ins. and less in a cyclonic system with its centre off the coasts of Finmark. Gradients steep over the whole of northern Europe, and rather steep over England and Ireland. Cyclonic area subsequently moving in an east-south-easterly direction across the north of Scandinavia; new disturbance approaching our own northern coasts in evening.

Saturday, 31st January, 1903.

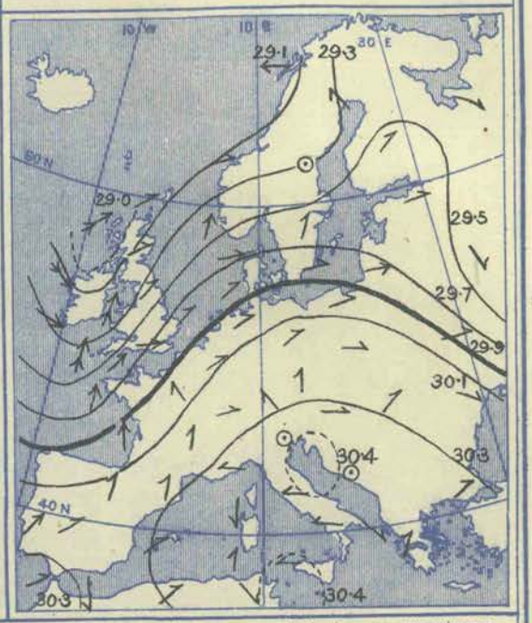
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in the eastern and central parts of Great Britain, and also in the north and west of France. Cloudy and unsettled in nearly all other parts of Europe, with showers on our own western coasts, and steady rain at Wisby and Lemberg; snow falling on the west coasts of Norway. Rain falling later over the whole of our Islands and the neighbouring parts of the Continent, and snow at several of our northern stations; lightning seen at Holyhead at night.

Temperature risen in the north of our Islands and the west of Norway, and also in Portugal and the south of Russia; fallen elsewhere. Morning readings, highest, 56° at Algiers, 55° at Sanguinaire, 52° at Palma and Malta, and 51° at Oran; above 45° on most parts of our own western coasts. Lowest, 4° at Archangel, 17° at Kuopio, 19° at Haparanda, and 20° at Hermanstadt; below the freezing point also over central France and south Germany. Rising during day to 50° and upwards on several parts of our western coasts, and to 54° at Scilly; exceeding 55° over southern Europe generally, and reaching 62° at Palermo, and 61° at Palma and San Fernando.

Wind Southerly or South-Westerly in our Islands, and strong to a gale in force on our extreme north-west coasts; Westerly over Sweden, Denmark, the Baltic, and the western parts of Russia. Light to moderate from the Southward or South-Eastward over France and the north of Spain; variable in the extreme south of France; light from between West and North in Italy. Subsequently increasing to a gale from the Southward in nearly all parts of Great Britain (gale severe in the south of England); shifting to the North-Westward in the west of Ireland, and remaining strong to a gale in force.

Barometer highest, 30·6 ins. to 30·5 ins. over the central parts of the Mediterranean; 30·3 ins. and upwards in an anticyclone covering nearly the whole of central and southern Europe. Lowest, 28·9 ins. and less in a cyclonic system lying over central Russia; 29·3 ins. and less in another disturbance lying to the northward and north-westward of our Islands. Deep "V"-shaped depression advancing eastwards across the United Kingdom later, and barometer falling quickly over the whole of Great Britain.

IV.—GENERAL NOTES, etc.

During the early part of the week the barometer was highest in a large anticyclone covering the whole of Russia and central and southern Europe, and lowest in a series of cyclonic disturbances which skirted our own extreme northern coasts, and which afterwards travelled north-eastwards to the northern parts of Norway. Over north-western Europe generally the prevailing winds were therefore South-Westerly (often strong to a gale in force), and the weather mild and changeable, with heavy rain, and occasional thunder and lightning, in the north of Ireland and the west and north of Scotland.

After the middle of the week the portion of the high-pressure system lying over Russia gave way, and for the remainder of the time the cyclonic disturbances which continued to advance from the Atlantic were enabled to pursue a more easterly course, their centres travelling in an almost due easterly direction over the extreme northern parts of Scandinavia. Until very nearly the close of the period little change occurred over our Islands beyond a considerable increase in the amounts of rain which continued to fall daily in the western parts of Scotland. On Saturday, however, a large "V"-shaped cyclonic system of considerable depth advanced eastwards directly across the United Kingdom and caused Southerly gales in most districts, the wind in the rear of the disturbance shifting quickly to the North-Westward in Ireland and Scotland, but continuing to blow very strongly. In the south of England the gale which blew on the evening or night of the 31st was one of the strongest experienced for a considerable time past.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 20.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	8·7	− 0·8	16	− 2	SHEFFIELD	7·9	—	13	—	WESTBOURNE	12·5†	− 2·7	20†	− 4
STRATHPEFFER SPA	5·4	− 5·0	10	− 9	WORKSOP	7·5	− 3·1	13	− 5	VENTNOR HOSPITAL	16·2	+ 1·7	26	+ 3
EDINBURGH	3·6	− 6·3	6	− 11	THURCASTON	7·6	− 3·8	13	− 6	BOURNEMOUTH	—	—	—	—
COCKLE PARK	10·5	—	18	—	MARGATE	17·8	+ 4·8	29	+ 8	MARLBOROUGH	4·5	− 7·4	7	− 12
NEWCASTLE-ON-TYNE	8·8	—	15	—	BROADSTAIRS	17·1	—	28	—	SOUTHPORT	7·4	—	13	—
YORK	2·8	− 6·9	5	− 12	RAMSGATE	—	—	—	—	RHYL	14·7	—	25	—
CROMER	13·1	—	22	—	EASTBOURNE	21·6	+ 7·1	35	+ 11	COLWYN BAY	—	—	—	—
LOWESTOFT	15·4	—	26	—	BRIGHTON	15·9	+ 1·5	26	+ 3	ABERDOVEY	9·1†	—	15†	—
HOLLESLEY BAY	17·8	—	29	—	WORTHING	16·9	—	27	—	TENBY	10·5	− 5·7	17	− 9
DUNMOW	10·3	—	17	—	BOGNOR	17·4†	—	28†	—	TORQUAY	10·0	− 5·2	16	− 8
					WATERGATE PARK	9·9	—	16	—	NEWQUAY	9·9	− 5·3	16	− 9
										GUERNSEY	16·3†	+ 0·1	26†	0

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Jan. 24th, 1903.	York	—	—	—	—	—	—	—	—	—	—	—	5·4	− 2·3	10	− 4
" " " " "	Eastbourne	—	—	—	—	—	—	—	—	—	—	—	8·0	− 4·6	14	− 8

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 5.] *Fourth Series.* WEEK ENDING SATURDAY, FEBRUARY 7TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 26.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	53	30	47·0	37·7	42·4	5 above	21	+14	12	−24	44	+ 12	170	− 12
	1. SCOTLAND, EAST	54	29	47·2	35·5	42·2	5 above	29	+21	18	−23	54	+ 17	197	− 14
	2. ENGLAND, N.E.	56	27	48·0	37·3	42·7	5 above	25	+16	13	−22	64	+ 26	145	− 38
	3. ENGLAND, EAST	53	27	47·1	36·0	41·6	3 above	14	+ 4	25	−14	72	+ 30	138	− 66
	4. MIDLAND COUNTIES	56	28	47·5	37·0	42·3	4 above	23	+11	14	−25	77	+ 26	157	− 52
	5. ENGLAND, SOUTH	53	28	46·6	37·9	42·3	3 above	19	+ 5	11	−18	90	+ 28	104	− 55
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	54	30	48·3	41·0	44·7	5 above	23	+13	3	−26	57	+ 7	132	− 19
	7. ENGLAND, N.W.	56	29	47·9	38·9	43·4	4 above	23	+12	9	−19	81	+ 32	129	− 19
	8. ENGLAND, S.W.	54	30	48·2	40·4	44·3	3 above	23	+ 6	4	−18	113	+ 34	79	− 37
	9. IRELAND, NORTH	56	32	48·7	39·9	44·4	4 above	26	+12	6	−19	66	− 1	120	− 11
	10. IRELAND, SOUTH	57	32	49·8	40·7	45·3	3 above	29	+ 8	4	−15	114	+ 11	71	− 29
	— CHANNEL ISLANDS	54	36	49·0	41·2	45·1	1 above	25	+ 1	2	− 7	161	+ 43	33	− 18

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 26.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	23	12 more	25	+ 1	9·6	+ 3·6	3	− 8	6	−13	28	− 10	11	− 4
	1. SCOTLAND, EAST	4	8	2 more	21	+ 2	4·7	+ 1·6	6	− 9	9	−15	32	− 23	12	− 8
	2. ENGLAND, N.E.	1	less than half	4 less	17	− 1	2·0	− 0·1	11	− 6	18	− 9	44	− 11	16	− 4
	3. ENGLAND, EAST	1	less than half	4 less	14	− 5	1·4	− 0·7	17	+ 1	27	+ 2	65*	+ 3	22	+ 1
	4. MIDLAND COUNTIES	2	less than half	5 less	16	− 2	1·9	− 0·7	12	− 2	20	− 4	51	0	18	0
	5. ENGLAND, SOUTH	3	1	4 less	20	+ 1	2·1	− 0·8	13	− 2	21	− 3	58	− 3	20	− 1
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	17	6 more	23	+ 1	8·0	+ 2·2	6	− 6	10	−10	24	− 25	9	− 9
	7. ENGLAND, N.W.	5	7	0 (average)	22	+ 2	3·9	+ 0·5	12	0	18	0	55	+ 7	19	+ 3
	8. ENGLAND, S.W.	5	3	5 less	23	+ 1	4·7	+ 0·3	12	− 5	19	− 7	55	− 13	18	− 4
	9. IRELAND, NORTH	6	8	2 more	25	+ 1	5·2	+ 1·6	4	−11	6	−17	44	− 13	16	− 5
	10. IRELAND, SOUTH	6	5	3 less	27	+ 4	5·7	+ 1·0	8	− 8	13	−12	50	− 18	17	− 6
	— CHANNEL ISLANDS	4	3	4 less	26	+ 3	3·5	− 0·2	18	− 2	27	− 3	70	− 8	23	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period has differed greatly in the various parts of the Kingdom. Over the western and extreme northern districts rain was very frequent; it was not, however, heavy as a rule, until the end of the period, when falls of more than one inch, composed of rain and sleet, were very common in Scotland. Over the greater part of England the weather, although mostly cloudy, was generally dry.

Temperature was above the mean, the excess ranging from 1° in the Channel Islands to 4° or 5° in most other districts. The highest of the maxima were recorded on Saturday, when they varied from 57° in Ireland S. and 56° in several other districts to 53° in Scotland N. and England S. and E. The lowest of the minima, registered during the earlier days of the week, varied from 27° in England N.E. and E. to 32° over Ireland, and to 36° in the Channel Islands.

Rainfall was much more than the mean in Scotland N., considerably more in Scotland W., and rather more in Scotland E. and Ireland N.; while in England N.W. the mean was just equalled. In all other districts there was a deficit, the fall over eastern and central England being scarcely appreciable. The total fall for the week was 4·38 ins. at Fort William, 4·30 ins. at Glencarron, and 3·37 ins. at Laudale.

Bright Sunshine exceeded the normal in England E., and was just equal to it in England N.W., but was deficient in all other districts. The percentage of the possible amount of duration ranged from 27 in England E. and the Channel Islands to 10 in Scotland W., and to 6 in Scotland N. and Ireland N

Barometer and Wind. At the commencement of the week a deep "V"-shaped depression was moving eastwards from Scotland to Scandinavia, and the barometer was rising rapidly in its rear. It was followed by an anticyclone from the Atlantic, which, appearing over our western and south-western coasts on Monday, subsequently moved slowly south-eastward to the Bay of Biscay, and finally eastwards to Germany. In the meantime, fresh cyclonic disturbances skirted our extreme western and north-western coasts, and caused the winds, which had for a time been fresh or strong from the Northward, to back towards South and West again, and to blow frequently with great force in the most western districts, and freshly or strongly even in the South and East.

207 | 90 Wy & S. Ltd
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 25 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	47	32	45·1	39·1	42·1	+ 3·6	13	8	7	1·82	+ 1·12	*	*	*	*
	Stornoway	51	33	48·3	37·7	43·0	+ 4·1	25	12	7	1·33	+ 0·33	3·1	- 9·6	5	- 17
	Wick	50	30	47·1	36·7	41·9	+ 4·2	14	22	6	0·80	+ 0·30	*	*	*	
	Lairg Ⓢ	50	31	46·1	36·9	41·5	+ 6·1	11	21	6	0·74	- 0·03	*	*	*	*
	Glencarron Ⓢ	51	31	46·9	37·1	42·0	+ 4·9	14	14	7	4·30	+ 2·45	*	*	*	*
	Fort Augustus Ⓢ	51	31	47·5	37·2	42·4	+ 4·4	23	13	6	2·85	+ 1·86	2·0	- 6·3	3	- 11
	Fort William	53	34	47·8	39·3	43·6	+ 4·8	23	8	7	4·38	+ 2·38	3·6	- 6·8	7	- 11
1. SCOTLAND E.	Nairn	53	32	48·7	37·4	43·1	+ 5·5	27	13	4	0·29	- 0·10	*	*	*	*
	Aberdeen	52	32	47·0	37·1	42·1	+ 4·1	21	14	3	0·30	- 0·25	5·6	- 10·9	10	- 19
	Braemar Ⓢ	49	29	44·7	34·6	39·7	+ 5·3	8	28	5	1·20	+ 0·52	*	*	*	*
	Ochtertyre Ⓢ	51	32	47·3	38·7	43·0	+ 5·6	21	9	5	1·59	+ 0·64	*	*	*	*
	Leith	54	32	49·4	39·0	44·2	+ 4·9	28	8	3	0·74	+ 0·36	*	*	*	*
	Marchmont Ⓢ	54	30	45·9	36·4	41·2	+ 4·4	11	23	3	0·70	+ 0·10	6·3	- 8·3	10	-14
2. ENGLAND, N.E.	Alnwick Castle	54	33	48·7	36·8	42·8	+ 4·9	27	15	1	0·04	- 0·49	*	*	*	*
	Durham	53	31	47·1	37·7	42·4	+ 4·9	21	12	0	0·00	- 0·40	8·2	- 6·4	13	- 10
	Shields	56	32	49·0	38·6	43·8	+ 5·0	27	10	0	0·00	- 0·37	*	*	*	*
	Scarborough Ⓜ	55	32	49·3	36·5	42·9	+ 4·2	29	15	1	0·04	- 0·39	11·8	—	19	—
	Spurn Head	53	34	47·0	38·0	42·5	+ 4·0	20	11	1	0·02	- 0·31	*	*	*	*
	Fulbeck (Lincolnshire)	53	27	46·6	36·3	41·5	+ 4·2	13	24	0	0·00	- 0·38	15·2	—	24	—
3. ENGLAND, E.	Hillington Ⓜ	53	27	48·0	35·7	41·9	+ 4·1	17	27	1	0·03	- 0·40	14·6	- 0·9	23	- 1
	Yarmouth	53	28	46·3	35·0	40·7	+ 2·8	12	28	1	0·02	- 0·40	*	*	*	*
	Geldeston	53	27	47·9	35·4	41·7	+ 3·0	17	28	2	0·02	- 0·33	18·3	+ 2·0	29	+ 3
	Cambridge	53	28	49·1	35·0	42·1	+ 3·7	30	20	1	0·01	- 0·32	18·8	+ 3·0	30	+ 5
	Felixstowe	51	30	45·1	35·9	40·5	+ 1·8	9	24	2	0·04	—	14·5†	—	23†	—
	Rothamsted	52	30	47·0	37·2	42·1	+ 4·4	21	13	2	0·05	- 0·45	15·6	+ 0·9	25	+ 2
	Shoeburyness	51	30	46·6	37·6	42·1	+ 3·1	19	12	1	0·02	- 0·30	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	52	29	47·7	36·9	42·3	+ 4·9	24	14	4	0·10	- 0·50	16·0	—	26	—
	Bawtry (Hesley Hall)	56	32	49·1	37·0	43·1	+ 4·8	29	14	2	0·04	- 0·35	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	52	29	49·6	36·4	43·0	+ 5·0	31	16	0	0·00	- 0·43	*	*	*	*
	Cheadle Ⓜ	49	28	45·5	35·7	40·6	+ 3·5	10	25	3	0·08	— 0·49	*	*	*	*
	Birmingham (Edgbaston)	50	32	46·4	37·8	42·1	+ 3·6	18	12	0	0·00	- 0·46	8·2	—	13	—
	Churchstoke Ⓜ	51	31	47·8	37·1	42·5	+ 4·3	24	14	3	0·10	- 0·50	14·1	- 1·6	22	- 3
	Hereford Ⓜ	52	31	47·8	36·8	42·3	+ 3·1	24	15	2	0·03	- 0·48	*	*	*	*
	Cirencester	51	28	46·0	36·8	41·4	+ 3·4	11	21	2	0·04	- 0·58	10·0	- 5·8	16	- 9
	Oxford	53	32	47·4	38·6	43·0	+ 4·0	21	10	0	0·00	- 0·42	11·0	- 3·5	17	- 6
5. ENGLAND, S.	London	53	30	47·7	36·7	42·2	+ 2·4	24	15	3	0·11	- 0·32	12·6‡	+ 4·2‡	20‡	+ 7‡
	Swarraton (Alresford) Ⓜ	50	28	45·8	36·5	41·2	+ 2·9	11	22	3	0·13	- 0·53	*	*	*	*
	Dungeness	49	28	46·3	37·0	41·7	+ 1·9	12	21	4	0·08	- 0·28	15·4	—	24	—
	Hastings (St. Leonards)	48	32	45·9	37·8	41·9	+ 1·9	11	18	3	0·10	- 0·45	14·7	- 3·5	23	- 5
	Southampton	51	32	48·4	39·1	43·8	+ 3·3	25	8	3	0·03	- 0·60	13·1	- 3·4	20	- 5
	Portland Bill	50	37	46·9	41·0	44·0	+ 1·9	18	3	4	0·08	—	*	*	*	*
	Shaftesbury Ⓜ	49	29	45·5	37·1	41·3	+ 2·9	10	20	4	0·27	- 0·40	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	54	35	50·2	41·4	45·8	+ 6·0	29	2	7	3·37	+ 1·66	*	*	*	*
	Glasgow	53	34	47·6	41·2	44·4	+ 5·6	20	2	4	1·73	+ 0·92	5·0	- 4·2	8	- 7
	Cally Ⓢ	52	30	48·0	39·7	43·9	+ 5·3	23	6	7	1·44	+ 0·42	*	*	*	*
	Douglas (Isle of Man)	51	35	47·5	41·5	44·5	+ 3·9	20	1	5	0·42	- 0·45	7·1	- 8·4	12	- 14
7. ENGLAND N.W.	Newton Reigny	53	31	46·6	37·3	42·0	+ 5·6	13	13	5	1·90	—	11·7	—	19	—
	Stonyhurst	50	30	46·1	37·9	42·0	+ 3·7	11	11	6	1·08	+ 0·21	11·9	- 0·5	19	- 1
	Blackpool Ⓜ	51	32	47·4	38·9	43·2	+ 4·2	21	9	5	0·61	+ 0·01	14·1	+ 1·0	23	+ 2
	Manchester (Prestwich)	51	29	47·8	37·4	42·6	+ 4·0	24	13	5	0·58	- 0·03	6·7	—	11	—
	Liverpool Obsy. (Bidston)	52	34	48·1	39·3	43·7	+ 4·0	23	8	3	0·10	- 0·35	12·2	—	20	—
	Chester (Hawarden Bridge)	56	34	51·0	39·3	45·2	+ 4·8	34	8	2	0·07	—	*	*	*	*
	Llandudno Ⓜ	55	36	49·7	40·5	45·1	+ 3·4	28	4	5	0·33	- 0·22	15·0	- 0·3	24	- 1
	Holyhead	49	36	46·7	40·4	43·6	+ 1·8	18	4	6	0·57	- 0·07	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	5	0·80	- 0·22	*	*	*	*
	Pembroke	50	37	48·0	42·0	45·0	+ 2·7	21	0	5	0·21	- 0·51	8·2	- 8·6	13	- 13
	Clifton	53	34	47·5	39·9	43·7	+ 3·4	21	6	5	0·12	- 0·56	*	*	*	*
	Bath	54	30	48·6	39·3	44·0	+ 3·2	25	8	3	0·13	- 0·47	13·7	—	21	—
	Arlington (N. Devon)	51	32	46·9	38·0	42·5	+ 2·0	20	11	5	0·59	- 0·45	*	*	*	*
	Cullompton Ⓜ	54	31	48·4	39·4	43·9	+ 3·4	24	7	4	0·12	- 0·62	10·1	- 4·6	16	- 7
	Falmouth	53	36	48·7	42·4	45·6	+ 2·0	25	0	5	0·18	- 0·84	17·9	- 0·1	28	0
	Plymouth	51	34	49·1	41·6	45·4	+ 2·9	25	1	6	0·26	- 0·51	10·3	- 6·4	16	- 10
9 IRELAND, N.	Malin Head	52	36	47·4	41·1	44·3	+ 2·6	20	3	6	0·94	+ 0·40	*	*	*	*
	Edenfel (Omagh	53	32	47·7	38·7	43·2	+ 4·7	22	9	5	1·04	+ 0·37	*	*	*	*
	Blacksod Point	53	32	49·4	41·0	45·2	+ 2·3	27	3	7	1·16	+ 0·70	*	*	*	*
	Markree Castle	56	32	49·6	40·1	44·9	+ 4·9	28	5	5	1·00	+ 0·25	2·5	- 11·4	4	- 19
	Armagh	53	32	49·3	39·0	44·2	+ 4·6	28	8	5	0·26	- 0·29	4·4	- 9·8	7	- 16
	Donaghadee	55	32	49·0	39·7	44·4	+ 3·7	26	6	6	0·35	- 0·23	*	*	*	*
10. IRELAND, S.	Dublin	57	34	51·7	41·6	46·7	+ 4·6	35	1	4	0·17	- 0·31	13·1	- 3·2	21	- 5
	Parsonstown	55	32	48·7	39·1	43·9	+ 3·5	25	8	5	0·30	- 0·28	6·6	- 8·5	11	- 14
	Kilkenny	55	32	48·4	39·3	43·9	+ 2·5	25	8	5	0·49	- 0·18	*	*	*	*
	Waterford	51	33	48·1	40·7	44·4	+ 1·8	22	4	5	0·31	- 0·57	*	*	*	*
	Roche's Point	52	34	48·6	41·1	44·9	+ 1·4	24	3	7	0·31	- 0·74	*	*	*	*
	Valencia	54	35	50·0	42·3	46·2	+ 1·7	29	0	7	1·09	- 0·19	5·2	- 11·0	8	- 17
	Killarney	54	33	51·6	40·6	46·1	+ 2·9	35	4	7	1·20	- 0·10	*	*	*	*
	Foynes	55	34	51·2	40·9	46·1	+ 3·7	33	3	4	0·46	- 0·31	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	36	50·3	42·9	46·6	+ 1·1	32	0	3	0.06	- 0·64	12·6	- 6·4	19	- 10
	Jersey	52	36	47·6	39·4	43·5	+ 0·6	21	7	4	0·52	- 0·12	21·4	+ 0·7	33	+ 1

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

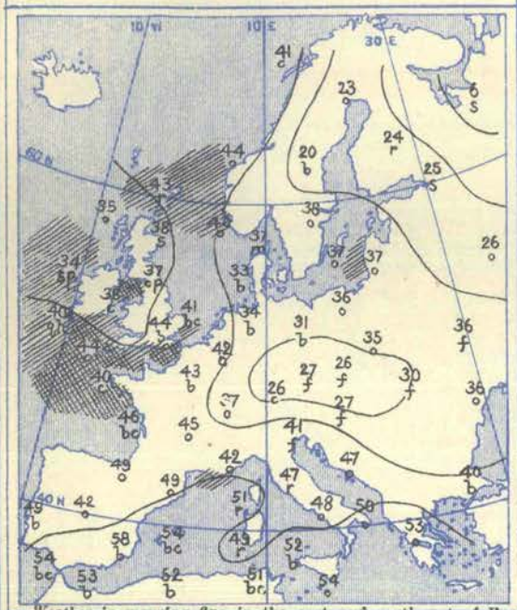
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster. For additional Reports of Sunshine, see last page.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

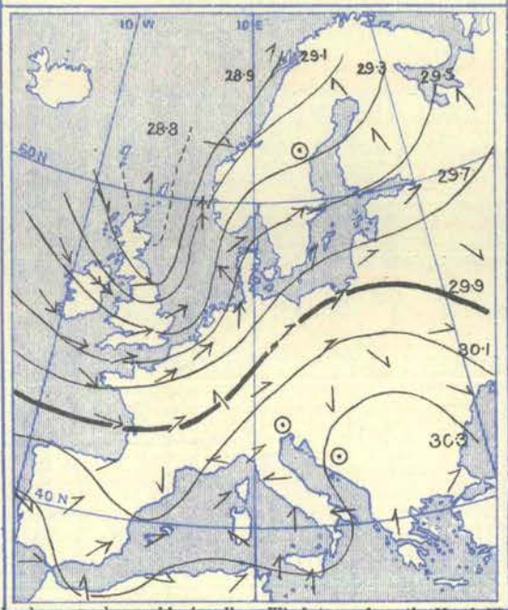
Erratum.—Hillington.—In last week's report the Bright Sunshine Values at Hillington were in error. The correct figures are 7·9 hrs., - 5·3 hrs., 13 °/.. - 9 °/..

Sunday, 1st February, 1903.

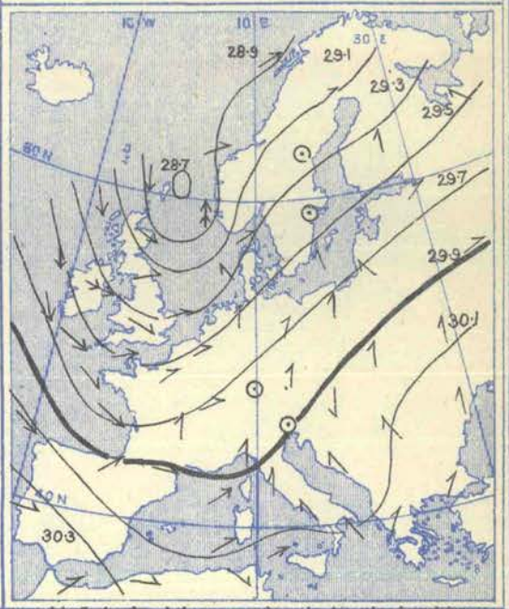
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in the east and south-east of England; very changeable in all other parts of the United Kingdom, with snow in the east of Scotland, and hail or sleet showers at many of our western stations. Fine over the Netherlands and north Germany, but dull over the Continent generally, with rain at some of the central stations in France and Italy, snow falling over northern Russia. Hail or sleet falling later in nearly all parts of the United Kingdom, and heavy rain at some of the French and Italian stations. Thunder and lightning occurring in several parts of England.

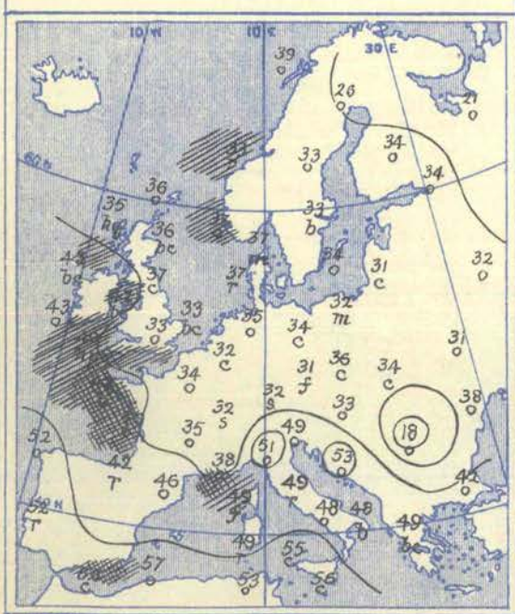
Temperature fallen several degrees in our Islands, Denmark, Germany, and Austria. Morning readings highest, 58° at Alicante, and 54° at Palma, San Fernando and Malta; above 50° at several of the Mediterranean stations. Lowest, 6° at Archangel, 20° at Hernösand, and 23° at Haparanda; below the freezing point over Russia and the north of Sweden generally, and very little above it in some parts of Ireland and Scotland. Daily maxima below 40° in the north of Scotland, and below 45° in most other parts of the United Kingdom; thermometer reaching 55° or more in Spain and the southern parts of France and Italy.

Wind strong from the North-Westward in Ireland and the west and north of Scotland, and from the Westward or South-Westward in other parts of our Islands, and also in the west and north of France. South-Westerly or Southerly over the northern and central parts of the Continent, with a gale at Skudesnaes. Variable in Italy; Easterly in the south of France; Westerly or South-Westerly over the Spanish Peninsula. Subsequently veering to the North-Westward in many parts of England and the west of France; no important change occurring elsewhere.

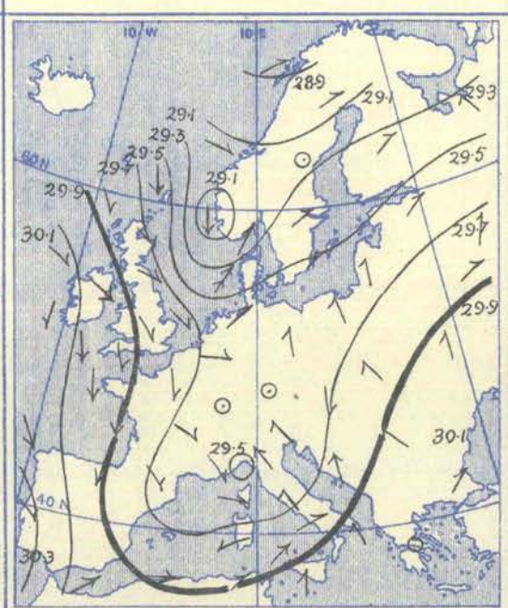
Barometer highest, 30·3 ins. and upwards over Algeria and the south of Spain, and also over south-eastern Europe generally. Lowest, 28·8 ins. and less in a large "V-shaped" disturbance, with its central position off the north-east of Scotland. Latter system subsequently moving eastwards, and barometer rising briskly in all the more western and northern parts of the United Kingdom.

Monday, 2nd February, 1903.

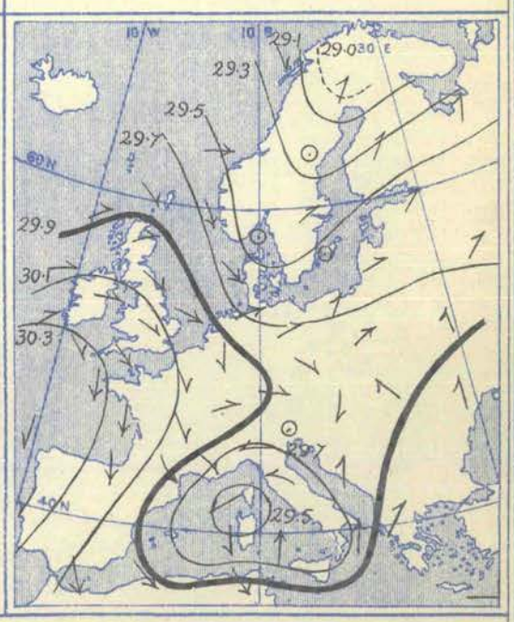
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the United Kingdom generally, but hail showers reported in the Scilly and Channel Islands, and also at Stornoway. Cloudy or dull over nearly the whole of the Continent, with rain in several places, and with snow at Belfort and Munich. A little rain falling later at several of our own western and northern stations, as well as in many parts of the Continent, and snow in the north of Scandinavia.

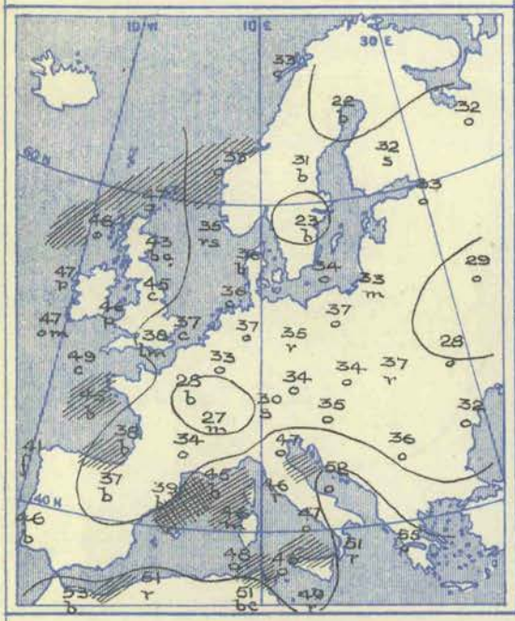
Temperature fallen decidedly over England, France, and the Netherlands, risen in most other countries. Morning readings highest, 57° at Oran and Algiers, 56° at Nemours, and 55° at Palermo and Malta; above 50° at several of the Mediterranean and Spanish coast stations. Lowest, 18° at Hermanstadt, 21° at Archangel, and 26° at Haparanda; slightly below the freezing point in many parts of northern and central Europe, as well as at inland stations in the north of England. Rising during day to 45° and upwards at most of our own western and northern stations, and to 50° at Valencia; exceeding 50° over Spain and the southern parts of France and Italy, and reaching 64° at Palermo.

Wind North-Westerly or Northerly over the whole of our Islands, France, and Spain, and strong in force in many places; South-Westerly or Southerly in the northern countries, with a gale at Fanö. Calm or variable over Austria and south Germany; South-Easterly over Italy and the Adriatic. Subsequently backing to the Westward or South-Westward in Ireland and the west of Scotland; no important change occurring elsewhere.

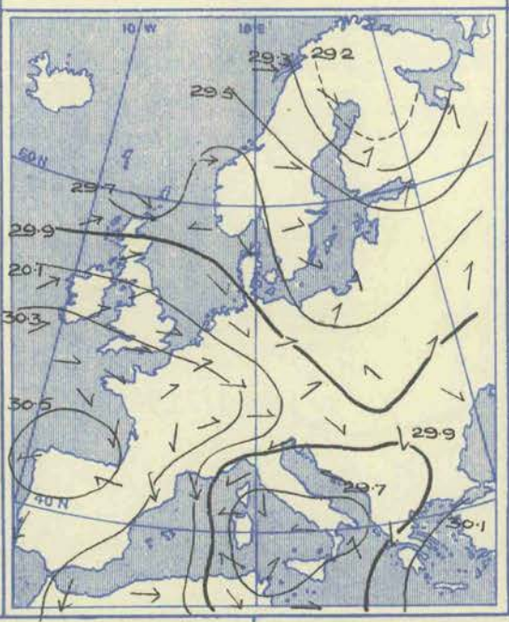
Barometer highest, 30·3 ins. and upwards in an anticyclone lying off the Portuguese coasts; 30·1 ins. and upwards in another system over Greece, Turkey, and Asia Minor. Lowest, 28·9 ins. and less in a cyclonic disturbance off the coasts of Finmark; 29·1 ins. and less in a well marked secondary over the extreme south of Norway. Former disturbance subsequently travelling in an east south-easterly direction to Lapland; secondary system moving eastwards across the south of Sweden, and partially filling up.

Tuesday, 3rd February, 1903.

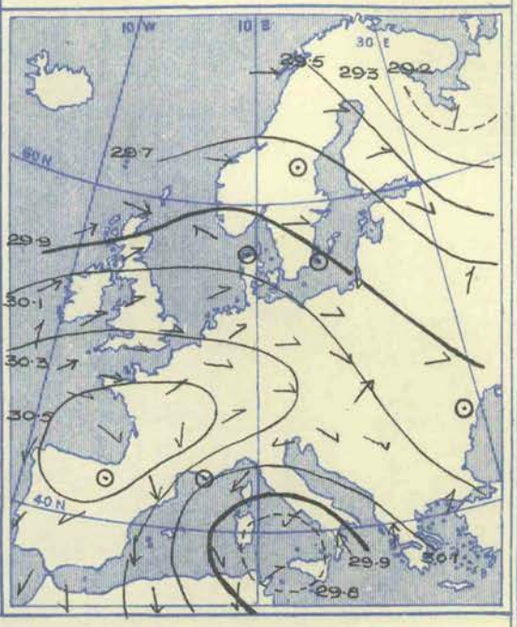
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull in the west and extreme north of our Islands, with showers in a few places. Fair or fine in the eastern and southern parts of Great Britain, and also over Sweden, France, and the Spanish Peninsula; dull in most other parts of Europe, with rain over northern Italy and at Berlin, and with snow in the west of Norway, as well as at Munich. Slight rains falling later in the west and extreme north and south of our Islands generally, as well as in Denmark, Germany, and Italy.

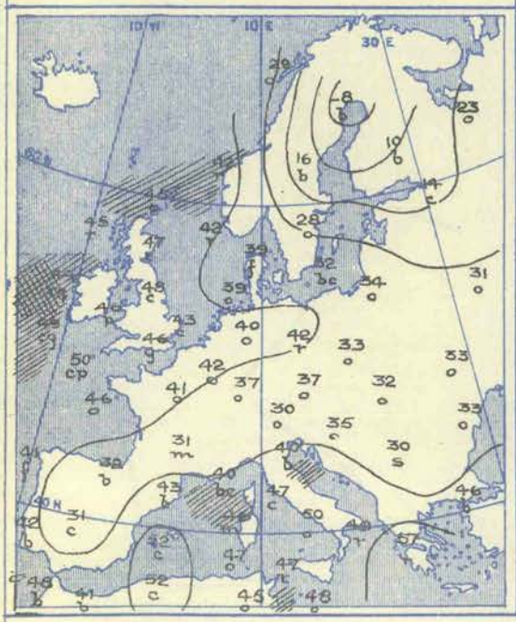
Temperature risen several degrees in our Islands, and to a less extent in Germany, but fallen elsewhere. Morning readings highest, 55° at Athens, 53° at Oran, and 52° at Lesina and Patras; above 45° at most of the Mediterranean stations, and also in the western and northern parts of the United Kingdom. Lowest, (1) 22° at Haparanda, and 26° at Uleaborg; (2) 27° at Belfort, and 28° at Paris; (3) 28° at Kiev, and 29° at Moscow. Rising during day to 50°, or slightly above it, at several of our own western and northern stations; exceeding 55° over the Spanish Peninsula and southern Italy, and reaching 61° at Palma.

Wind light to fresh from the Westward or South-Westward over the United Kingdom, and also over Scandinavia and northern Russia, and from the North-Westward in Denmark and north Germany; light and variable over central France. Well-marked cyclonic circulation reported over Italy and the Mediterranean. Subsequently increasing to a strong breeze from the South-Westward in the north of Ireland; no important change occurring elsewhere.

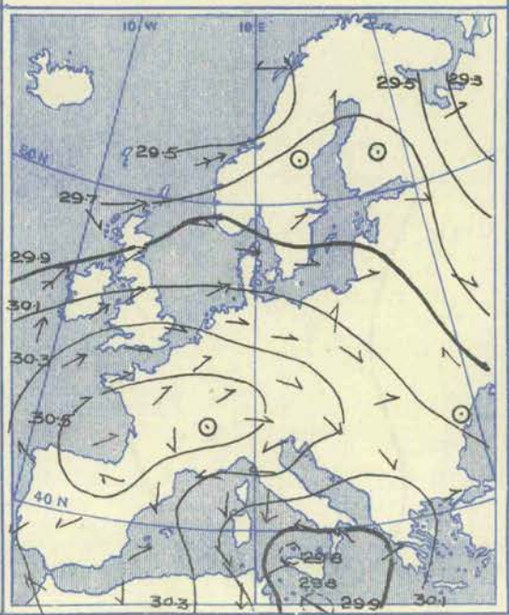
Barometer highest, 30·5 ins. and upwards over the Bay of Biscay and the north of Spain; 30·1 and upwards in an anticyclone covering nearly the whole of France, Spain, and the Netherlands, and extending northwards over the greater part of England and Ireland. Lowest, 29·2 ins. and less in a well-marked cyclonic area over Lapland; 29·7 ins. and less in a secondary system lying to the northward of the Shetlands. Depression over Lapland travelling eastward later; new disturbance approaching our own western coasts at night.

Wednesday, 4th February, 1903.

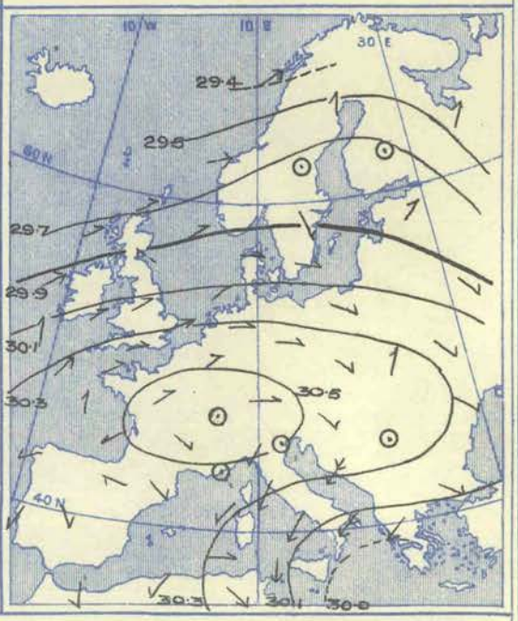
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over the greater part of our Islands and the Continent, with rain on our extreme north and north-west coasts, and in the west of Norway, as well as in Greece and southern Italy; snow reported in some parts of eastern Germany, Austria, and the south of Russia. Fair or fine on the east coast of Great Britain, and also over Spain, northern Italy, and the south of France. Rain falling later in the western and extreme northern and southern parts of the United Kingdom, but mostly in very small quantity.

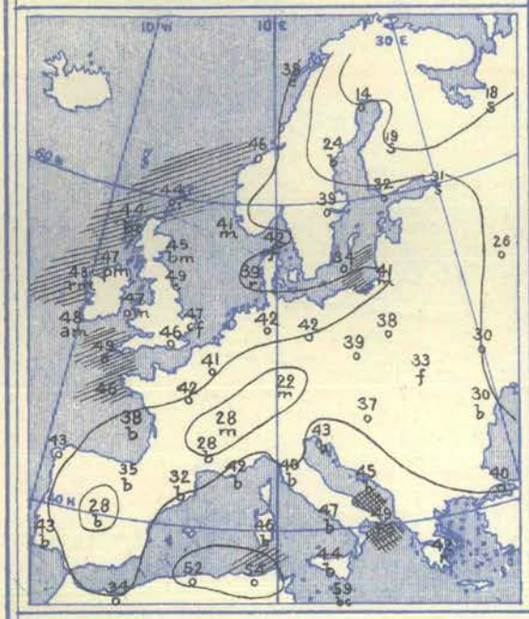
Temperature risen generally, but fallen slightly in the north of Scotland, and rapidly in the northern parts of Sweden and Russia. Morning readings highest, 57° at Athens, 52° at Palma and Algiers, and 51° at Patras; above 45° at most of the Mediterranean stations, and also over the western and northern parts of the United Kingdom. Lowest, −8° at Haparanda, +2° at Uleaborg, 10° at Kuopio, and 14° at St. Petersburg; below the freezing point over nearly the whole of Sweden and Russia, and also in some parts of central France and south Germany. Rising during day to 50° or slightly above it at several of our own western and northern stations; exceeding 55° in many parts of southern Europe.

Wind light to fresh from the South-Westward or Westward over the United Kingdom, and the northern and central parts of the Continent generally, but strong to a gale from the Southward in the west of Ireland. Varying between North and East over southern Europe, and blowing strongly from the former quarter at Rome and Pesaro. No important change occurring during day.

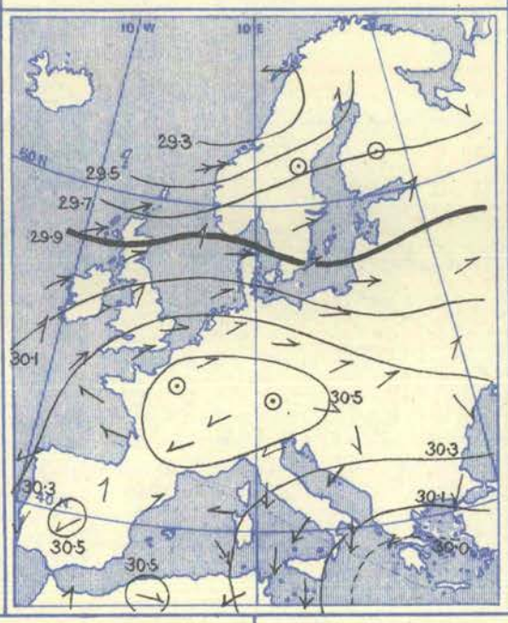
Barometer highest, 30·5 ins. and upwards over the greater part of France and south Germany, 30·3 ins. and upwards in an anticyclone covering the whole of Spain, France, Germany, and the Netherlands, and also the greater part of England. Lowest, 29·3 ins. and less in a cyclonic area moving eastwards across the extreme north of Russia; 29·5 ins. and less in another disturbance approaching the west of Norway. Both systems moving away to the north-eastward later, but new disturbances beginning to appear off our own western coasts.

Thursday, 5th February, 1903.

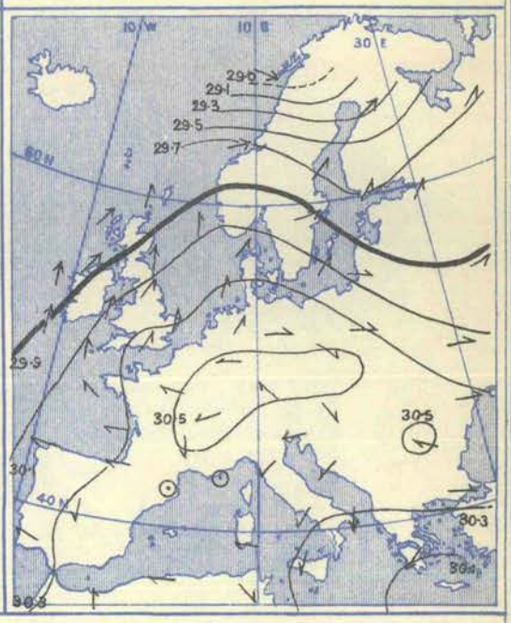
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in the northern and eastern parts of Great Britain, and also over France and southern Europe generally. Cloudy or dull elsewhere, with rain at most of the Irish stations, as well as at Fanö and Athens; snow falling in several parts of northern Russia. Slight rain falling later in the west and north of Scotland; no material change occurring elsewhere.

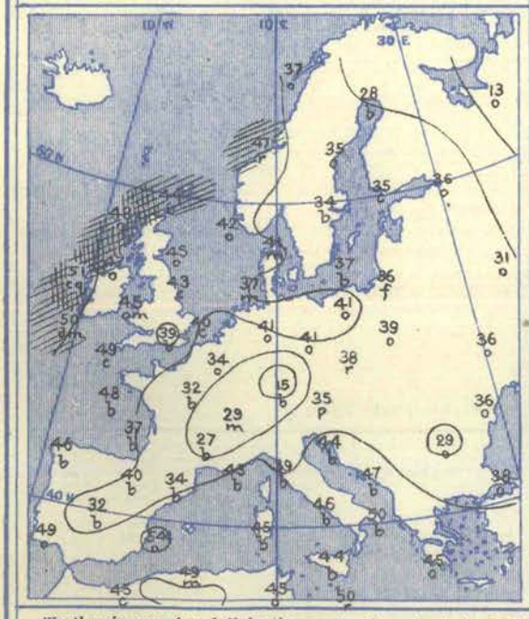
Temperature risen over England and the northern parts of the Continent—rapidly in Lapland; fallen in most other localities. Morning readings, highest, (1) 54° at La Calle, 52° at Algiers, 51° at Tunis, and 50° at Patras; (2) 50° at Leith (above 45° in nearly all parts of England and Ireland). Lowest, 14° at Haparanda, 18° at Archangel, 19° at Kuopio; below the freezing point over Russia and the north of Sweden generally, and also over south Germany and central France. Rising during day to 50° or slightly above it at most of our own western and northern stations; exceeding 55° over southern Europe generally, and reaching 64° at Coruna, and 63° at Cape Bearn.

Wind South-Westerly or Westerly over our Islands and the northern parts of the Continent generally; light to fresh in force in most places, but blowing a gale at Christiansund. Southerly on our own south-west coasts; light from the Eastward or South-Eastward in France; Northerly or North-Easterly in Greece and Italy, with a gale at Brindisi. Subsequently blowing very strongly from the Southward on our own extreme western coasts; no decided change occurring elsewhere.

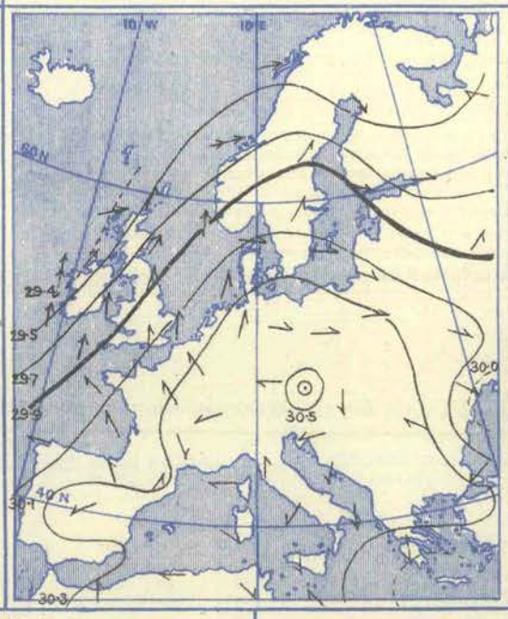
Barometer highest, 30·5 ins. and upwards over central France and south Germany; 30·2 ins. and upwards in an anticyclone covering the whole of central and southern Europe, and extending northwards over the greater part of England. Lowest, 29·2 ins. and less in a well marked cyclonic area with its centre off the northern part of the Norwegian coasts; gradients rather steep over the western and central parts of Scandinavia. Cyclonic system subsequently travelling north-eastwards across the north of Scandinavia; new disturbance approaching our own western coasts in evening.

Friday, 6th February, 1903.

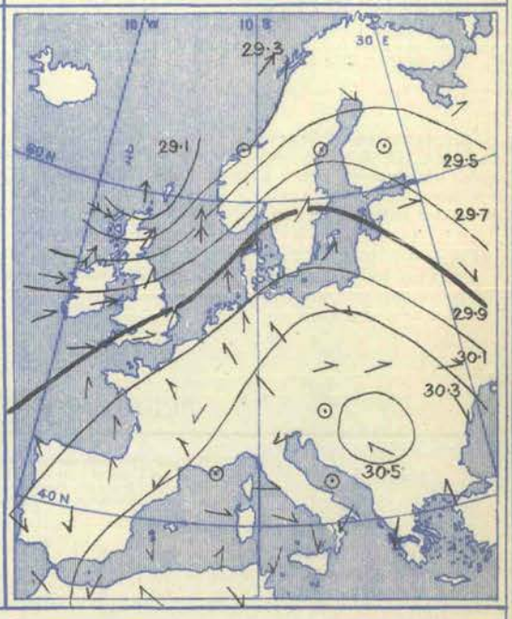
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull in the west and north of the United Kingdom, and also over the northern and central parts of the Continent generally, but fine in Sweden; rain falling at Valencia (Ireland) and also at Christiansund, and fog reported over Denmark and the south of Norway. Fair or fine in the south and east of England, as well as over France and southern Europe generally. Rain falling later in all the more western and northern parts of the United Kingdom, but mostly in small quantity.

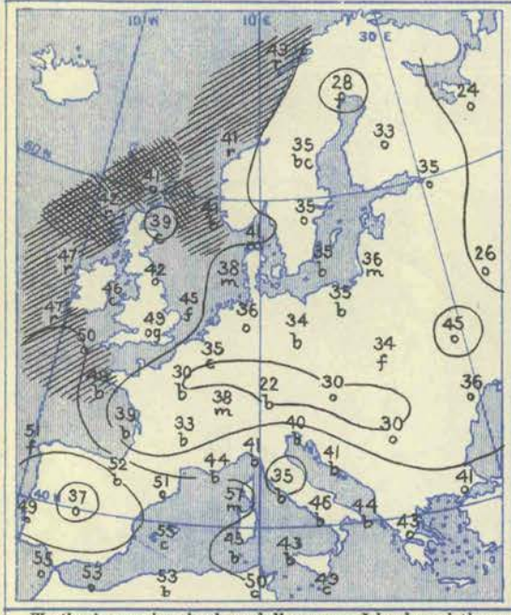
Temperature risen slightly in Ireland and the west and north of Scotland, and also in Spain and the extreme south of France, and considerably in the north of Sweden, fallen elsewhere. Morning readings highest, (1) 54° at Alicante, and 51° at Sanguinaire; (2) 51° at Blacksod Point, and 50° at Valencia; above 45° in the western and northern parts of the United Kingdom generally. Lowest, (1) 13° at Archangel, and 28° at Haparanda; (2) 15° at Munich, 27° at Lyons, and 29° at Belfort. Rising during day to 50°, or slightly above it, in many parts of the United Kingdom; exceeding 55° over the Spanish Peninsula, and the southern parts of France and Italy, and reaching 64° at Biarritz.

Wind Southerly over the United Kingdom generally, and strong to a gale in force in Ireland and the Hebrides. South-Westerly or Westerly over the whole of northern Europe, with a gale at Christiansund. Light from the South-Eastward over the greater part of France, but from the Northward over Italy and the Spanish Peninsula. Subsequently veering to the South-Westward or Westward over the whole of the United Kingdom, and blowing with the force of a gale on our northern coasts; gale severe in the Shetlands.

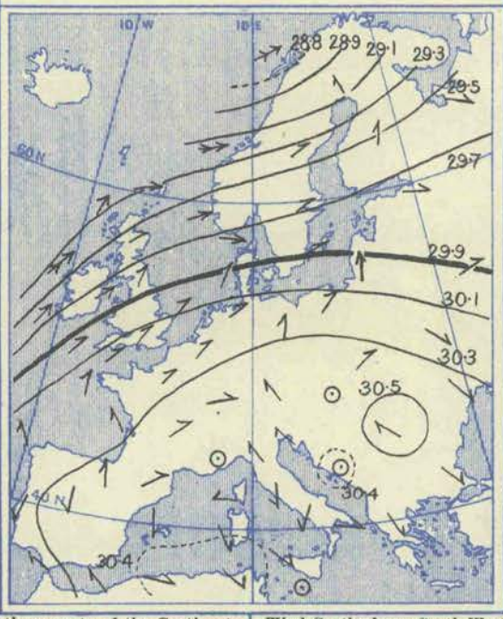
Barometer highest, 30·5 ins. and upwards, to 30·4 ins. in an anticyclone covering nearly the whole of Germany, Austria, northern Italy, and the east of France. Lowest, 29·3 ins. and less in a large cyclonic area, lying to the westward of our Islands; 29·5 ins. and less over the extreme northern parts of Russia and Scandinavia. Cyclonic disturbance in west subsequently travelling rapidly north-eastwards, and barometer rising quickly on our extreme western coasts.

Saturday, 7th February, 1903.

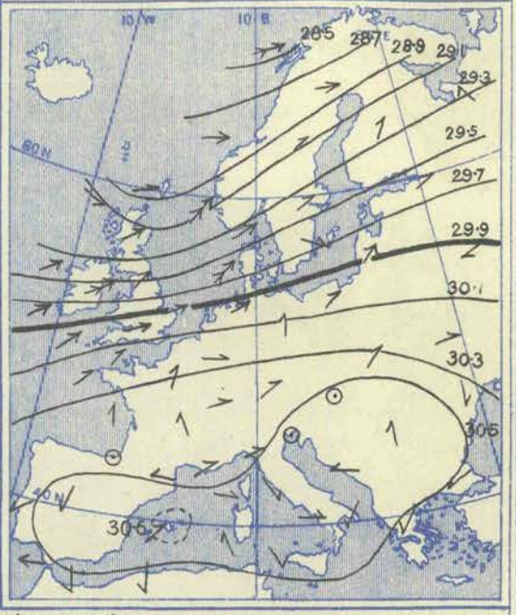
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over our Islands and the northern parts of the Continent generally, with rain in Ireland and the west and south of Scotland, and also in the west of Norway; sleet reported at Wick. Fine over the greater part of France and central and southern Europe, but foggy at some of the German and Austrian stations. Rain falling later over north-western Europe generally—heavily in the south of Scotland and the west of Norway.

Temperature risen over England, France, Spain, and the Netherlands, fallen in most other countries. Morning readings highest, 55° at Palma and San Fernando, and 53° at Lisbon, Oran, and Algiers; above 45° in the western and southern parts of the United Kingdom, and touching 50° at Bath. Lowest, (1) 22° at Munich, and 28° at Frankfürt; (2) 24° at Archangel, and 26° at Moscow. Rising during day to 50°, or slightly above it, in nearly all parts of the United Kingdom; exceeding 60° over Spain and the extreme southern parts of France and Italy, and reaching 64° at San Fernando and Oporto.

Wind Southerly or South-Westerly over north-western and northern Europe generally, and strong in force in many places, with a gale from the latter quarter in the north of Ireland and the west of Norway. Light to moderate from the south-eastward over the western parts of France and the Spanish Peninsula; variable over Italy and in the south of France. Subsequently increasing to a gale from the South-Westward in many parts of our Islands and northern Europe.

Barometer highest, 30·5 ins. and upwards in eastern Austria; 30·2 ins. and upwards in an anticyclone covering the whole of central and southern Europe. Lowest, 28·8 ins. and less in a deep cyclonic system, with its centre off the coast of Finmark. Small secondary disturbances appearing off the north and west of Scotland, and barometric gradients becoming very steep over the northern parts of Ireland and England.

IV.—GENERAL NOTES, etc.

At the beginning of the week the weather over western Europe was influenced by a large "V"-shaped cyclonic system which moved eastwards across our Islands and the northern parts of the Continent; in the rear of this disturbance the wind blew very strongly from the North-Westward over the whole of the United Kingdom, while squalls of hail and sleet occurred in most districts. As the cyclonic area passed away a large anticyclone spread over the western countries from the Atlantic, while a well-marked low-pressure system was developed simultaneously over the western parts of the Mediterranean, the latter disturbance occasioning considerable quantities of rain in Italy and the south of France.

Towards the middle of the week the high and low pressure systems both moved eastwards and south-eastwards, and for the remainder of the time the barometer was high over the central and southern parts of the Continent generally. In the north-western countries the weather was affected by a series of cyclonic disturbances of considerable size and intensity, the centres of which travelled in a north-easterly direction from the Atlantic, past our own extreme western and northern coasts, and thence on to the northern parts of Scandinavia. South-Westerly winds were consequently general, and on our western and northern, as well as on the Norwegian coasts, were frequently strong to a gale in force, the weather being mild, cloudy, and damp. At the close of the week small secondary disturbances advanced over Scotland and the extreme northern parts of England and Ireland, and occasioned very heavy falls of rain in those regions.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the reading at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Belgium, and Holland; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; at 9.25 a.m. in Spain, and 9 36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands; 4.36 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.25 p.m. in Spain; 6.51 p.m. in Algeria; 6·59 p.m. in Russia; 7 p.m. in Germany, Denmark, Norway, and Sweden; 8 p.m. in Austria and Italy, and 9 p.m. in Holland and Belgium. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 26.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	3·8	− 7·7	7	− 14
STRATHPEFFER SPA	4·3	− 8·6	7	− 15
EDINBURGH	5·0	− 6·8	8	− 11
COCKLE PARK	12·4	—	20	—
NEWCASTLE-ON-TYNE	5·4	—	9	—
YORK	6·9	− 5·1	11	− 8
CROMER	19·0	—	30	—
LOWESTOFT	15·7	—	25	—
HOLLESLEY BAY	14·8	—	23	—
DUNMOW	16·5	—	26	—
SHEFFIELD	15·1	—	24	—
WORKSOP	12·1	− 0·3	19	− 1
THURCASTON	12·9	− 0·1	21	0
MARGATE	12·4	− 2·6	19	− 4
BROADSTAIRS	13·9	—	22	—
RAMSGATE	—	—	—	—
EASTBOURNE	13·4	− 3·1	21	− 5
BRIGHTON	14·6	− 2·0	23	− 3
WORTHING	15·0	—	23	—
BOGNOR	17·3†	—	27†	—
WATERGATE PARK	14·2	—	22	—
WESTBOURNE	14·6†	− 2·6	23†	− 4
VENTNOR HOSPITAL	13·5	− 3·7	21	− 6
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	9·9	− 3·2	16	− 5
SOUTHPORT	12·9	—	21	—
RHYL	11·7	—	19	—
COLWYN BAY	—	—	—	—
ABERDOVEY	8·7†	—	14†	—
TENBY	—	—	—	—
TORQUAY	17·6	+ 0·9	27	+ 1
NEWQUAY	13·7	− 3·7	21	− 6
GUERNSEY	19·1†	+ 0·3	29†	0

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 6.] *Fourth Series.* WEEK ENDING SATURDAY, FEBRUARY 14TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 32.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	28	46·3	36·1	41·3	3 above	12	+ 5	24	−12	56	+ 17	194	− 24
	1. SCOTLAND, EAST	57	28	48·9	37·1	43·0	6 above	28	+19	14	−27	82	+ 36	211	− 41
	2. ENGLAND, N.E.	59	28	51·8	41·3	46·6	8 above	35	+25	2	−32	99	+ 51	147	− 70
	3. ENGLAND, EAST	61	31	53·0	41·0	47·0	8 above	39	+28	3	−35	111	+ 58	141	−101
	4. MIDLAND COUNTIES	59	30	52·2	41·9	47·1	9 above	36	+23	0	−37	113	+ 49	157	− 89
	5. ENGLAND, SOUTH	56	28	50·3	42·4	46·4	6 above	31	+16	0	−28	121	+ 44	104	− 83
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	55	30	50·1	41·2	45·7	6 above	29	+19	2	−27	86	+ 26	134	− 46
	7. ENGLAND, N.W.	60	30	49·9	43·4	46·7	7 above	33	+22	0	−28	114	+ 54	129	− 47
	8. ENGLAND, S.W.	57	30	50·8	42·2	46·5	5 above	32	+14	0	−22	145	+ 48	79	− 59
	9. IRELAND, NORTH	56	33	50·6	43·6	47·2	6 above	36	+21	0	−24	102	+ 20	120	− 35
	10. IRELAND, SOUTH	59	30	52·8	44·4	48·6	6 above	46	+24	0	−18	160	+ 35	71	− 47
	— CHANNEL ISLANDS	53	35	51·0	45·1	48·1	4 above	43	+18	0	− 9	204	+ 61	33	− 27

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 32.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	17	6 more	32	+ 3	11·3	+ 4·2	5	− 8	8	−13	33	− 18	10	− 6
	1. SCOTLAND, EAST	4	13	7 more	25	+ 2	6·0	+ 2·4	7	−10	10	−15	39	− 32	12	−10
	2. ENGLAND, N.E.	2	1	3 less	19	− 2	2·1	− 0·4	12	− 3	19	− 4	56	− 14	16	− 4
	3. ENGLAND, EAST	1	less than half	4 less	15	− 8	1·4	− 1·1	16	− 2	23	− 3	81	+ 1	23	0
	4. MIDLAND COUNTIES	1	less than half	5 less	17	− 5	1·9	− 1·2	13	− 2	20	− 3	64	− 2	18	− 1
	5. ENGLAND, SOUTH	2	less than half	5 less	22	0	2·1	− 1·3	12	− 4	17	− 6	70	− 7	19	− 2
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	14	4 more	29	+ 3	9·6*	+ 2·7	11	− 3	17	− 5	35	− 27	10	− 8
	7. ENGLAND, N.W.	3	3	3 less	25	+ 1	4·2	+ 0·2	11	− 2	17	− 3	66	+ 5	19	+ 1
	8. ENGLAND, S.W.	3	1	7 less	26	0	4·8	− 0·4	10	− 8	15	−12	65	− 21	18	− 6
	9. IRELAND, NORTH	5	5	1 less	30	+ 2	5·7	+ 1·5	5	−10	8	−16	49	− 23	14	− 7
	10. IRELAND, SOUTH	3	1	7 less	30	+ 3	5·8	+ 0·3	9	− 9	13	−13	59	− 26	17	− 7
	— CHANNEL ISLANDS	2	less than half	6 less	28	+ 1	3·5	− 0·8	10	−12	15	−17	80	− 19	21	− 5

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was again unsettled and rainy over Scotland and the north of Ireland, while in other parts of the Kingdom it was mostly fair and dry, though often very cloudy.

Temperature continued above the mean, the excess ranging from 3° in Scotland N., and 4° in the Channel Islands, to 6° in Ireland, and as much as 8° or 9° over central and eastern England. The highest of the maxima were recorded on the 8th over England and in most parts of Ireland, and on the 10th in Scotland. They ranged from 61° in England E. (at Cambridge), and 60° in England N.W., to 55° in Scotland W., and to 53° in the Channel Islands. The lowest of the minima occurred at the end of the week, and varied from between 28° and 30° in most parts of the Kingdom, to 33° in Ireland N., and to 35° in the Channel Islands.

Rainfall was considerably more than the mean in Scotland, but less over Ireland and England. At several stations in eastern, central, and southern England there was no appreciable fall at all. The excess in Scotland was chiefly due to a very heavy fall of snow, sleet, or rain that took place on the 8th.

Bright Sunshine was deficient in all districts. The percentage of the possible duration ranged from 23 in England E. and 20 in the Midland Counties, to 10 in Scotland E., and to 8 in Scotland N. and Ireland N.

Barometer and Wind.—During the earlier days of the week pressure was highest to the southward of our Islands, while cyclonic disturbances, secondary to very large systems in the far north, skirted or moved over our north-western and northern districts. The winds were consequently mainly Southerly to South-Westerly, and occasionally blew with the force of a gale along our western coasts. Later on the anticyclonic area became transferred to a more westerly and north-westerly position, until it extended south-eastwards from the Atlantic and our south-western coasts to the south and east of France. The change was accompanied by a veering of the wind to the West or North-West and a great diminution in its force, but at the end of the period, when a disturbance moved south-eastwards over the northern part of the North Sea, strong breezes or moderate gales were experienced on our northern and north-eastern coasts.

207 | 90 Wy & S. Ltd.
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 31 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	48	29	43·3	32·6	38·0	− 0·3	4	34	6	1·42	+ 0·65	*	*	*	*
	Stornoway	53	31	48·4	36·3	42·4	+ 3·4	27	16	7	1·37	+ 0·40	4·7	− 10·1	8	− 16
	Wick	57	32	45·7	35·3	40·5	+ 2·6	10	26	7	0·44	− 0·07	*	*	*	
	Lairg Ⓢ	52	31	43·8	35·4	39·6	+ 4·1	5	24	6	1·32	+ 0·56	*	*	*	*
	Glencarron Ⓢ	49	31	46·5	36·8	41·7	+ 4·7	13	22	7	2·76	+ 1·01	*	*	*	*
	Fort Augustus Ⓢ	54	28	48·0	37·1	42·6	+ 4·3	25	14	6	1·50	+ 0·54	3·8	− 6·0	6	− 10
	Fort William	51	33	48·4	39·5	44·0	+ 5·0	25	7	7	2·82	+ 0·88	5·0	− 7·7	8	− 12
1. SCOTLAND E.	Nairn	54	32	47·7	36·0	41·9	+ 4·1	16	25	4	0·58	+ 0·19	*	*	*	*
	Aberdeen	55	32	48·3	35·4	41·9	+ 3·7	18	28	5	1·24	+ 0·69	11·9	− 6·3	19	− 10
	Braemar Ⓢ	57	31	45·3	35·2	40·3	+ 5·7	9	26	4	1·15	+ 0·46	*	*	*	*
	Ochtertyre Ⓢ	55	28	49·7	35·9	42·8	+ 5·1	31	17	4	1·65	+ 0·75	*	*	*	*
	Leith	55	30	51·9	38·7	45·3	+ 5·6	37	9	3	1·70	+ 1·33	*	*	*	*
	Marchmont Ⓢ	54	30	50·4	41·1	45·8	+ 8·5	30	3	4	1·41	+ 0·82	3·5	− 13·0	6	− 20
2. ENGLAND, N.E.	Alnwick Castle	55	30	51·9	39·7	45·8	+ 7·5	36	6	3	0·49	− 0·05	*	*	*	*
	Durham	54	28	50·3	40·1	45·2	+ 7·3	30	5	2	0·07	− 0·33	9·8	− 6·4	15	− 10
	Shields	59	33	52·4	41·3	46·9	+ 7·7	37	2	2	0·06	− 0·31	*	*	*	*
	Scarborough Ⓜ	57	34	53·5	41·9	47·7	+ 8·6	40	0	3	0·07	− 0·37	14·3	—	22	—
	Spurn Head	56	37	50·4	42·9	46·7	+ 7·8	33	0	1	0·03	− 0·30	*	*	*	*
	Fulbeck (Lincolnshire)	57	35	52·1	42·1	47·1	+ 9·3	36	0	1	0·03	− 0·35	14·4	—	22	—
3. ENGLAND, E.	Hillington Ⓜ	58	31	52·7	39·2	46·0	+ 7·7	40	3	1	0·08	− 0·36	9·6	− 7·9	15	− 12
	Yarmouth	57	35	51·9	40·0	46·0	+ 7·7	36	6	2	0·10	− 0·32	*	*	*	*
	Geldeston	60	34	53·6	39·6	46·6	+ 7·7	42	7	1	0·02	− 0·33	9·6	− 8·5	14	− 13
	Cambridge	61	34	55·2	41·0	48·1	+ 9·3	47	3	1	0·01	− 0·32	19·2	+ 1·5	29	+ 2
	Felixstowe	59	34	51·5	41·3	46·4	+ 7·4	34	2	0	0·00	—	18·8†	—	28†	—
	Rothamsted	58	33	53·0	42·3	47·7	+ 9·5	40	0	1	0·01	− 0·48	23·4	+ 6·9	35	+ 10
	Shoeburyness	59	37	53·0	43·6	48·3	+ 9·0	44	0	0	0·00	− 0·32	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	55	31	49·8	41·2	45·5	+ 7·9	28	2	4	0·18	− 0·44	12·6	—	19	—
	Bawtry (Hesley Hall)	59	34	53·7	42·7	48·2	+ 9·5	43	0	1	0·02	− 0·36	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	59	36	53·1	41·7	47·4	+ 8·9	39	1	0	0·00	− 0·44	*	*	*	*
	Cheadle Ⓜ	58	36	50·3	41·9	46·1	+ 8·5	29	0	3	0·06	− 0·51	*	*	*	*
	Birmingham (Edgbaston)	58	37	51·4	42·3	46·9	+ 8·1	34	0	0	0·00	− 0·44	7·9	—	12	—
	Churchstoke Ⓜ	56	34	51·2	42·2	46·7	+ 8·1	33	0	2	0·04	− 0·56	12·7	− 4·3	19	− 7
	Hereford Ⓜ	57	30	54·9	40·6	47·8	+ 8·2	46	4	0	0·00	− 0·50	*	*	*	*
	Cirencester	55	31	52·6	41·0	46·8	+ 8·4	38	3	0	0·00	− 0·60	14·2	− 3·5	21	− 5
	Oxford	57	36	53·1	43·4	48·3	+ 8·8	44	0	0	0·00	− 0·43	17·4	+ 1·2	26	+ 2
5. ENGLAND, S.	London	56	36	52·9	43·7	48·3	+ 8·1	44	0	0	0·00	− 0·42	9·9‡	+ 0·3‡	15‡	+ 1‡
	Swarraton (Alresford) Ⓜ	53	28	51·1	41·0	46·1	+ 7·4	33	3	2	0·04	− 0·61	*	*	*	*
	Dungeness	53	34	49·3	40·9	45·1	+ 5·1	26	3	2	0·05	− 0·29	9·7	—	14	—
	Hastings (St. Leonards)	50	35	48·1	41·9	45·0	+ 4·8	21	0	2	0·07	− 0·46	9·2	− 11·0	14	− 16
	Southampton	55	35	52·9	44·0	48·5	+ 7·6	46	0	1	0·01	− 0·60	12·5	− 5·8	19	− 9
	Portland Bill	51	38	49·0	43·7	46·4	+ 3·8	31	0	2	0·03	—	*	*	*	*
	Shaftesbury Ⓜ	51	34	48·5	41·8	45·2	+ 6·4	23	1	2	0·03	− 0·63	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	33	50·0	39·8	44·9	+ 5·0	30	6	7	2·07	+ 0·41	*	*	*	*
	Glasgow	53	35	49·5	40·5	45·0	+ 6·0	27	4	4	2·05	+ 1·27	6·4	− 4·1	10	− 7
	Cally Ⓢ	53	30	50·8	40·6	45·7	+ 6·8	32	4	6	1·33	+ 0·34	*	*	*	*
	Douglas (Isle of Man)	55	35	50·2	43·8	47·0	+ 6·3	35	0	5	0·23	− 0·61	14·9	− 1·9	23	− 3
7. ENGLAND N.W.	Newton Reigny	52	30	49·6	38·7	44·2	+ 7·3	29	9	5	0·99	—	10·1	—	16	—
	Stonyhurst	53	34	48·0	42·7	45·4	+ 6·7	24	0	5	0·98	+ 0·12	8·4	− 5·9	13	− 9
	Blackpool Ⓜ	51	37	48·6	43·1	45·9	+ 6·7	27	0	4	0·20	− 0·37	14·2	− 0·7	22	− 1
	Manchester (Prestwich)	55	34	49·3	42·5	45·9	+ 7·1	27	0	3	0·41	− 0·16	7·9	—	12	—
	Liverpool Obsy. (Bidston)	55	39	50·1	44·4	47·3	+ 7·4	37	0	3	0·05	− 0·39	13·1	—	20	—
	Chester (Hawarden Bridge)	60	38	52·4	44·7	48·6	+ 7·8	46	0	2	0·02	—	*	*	*	*
	Llandudno Ⓜ	55	41	51·2	45·8	48·5	+ 6·7	46	0	3	0·07	− 0·47	17·3	+ 0·3	26	0
	Holyhead	54	42	49·6	45·4	47·5	+ 5·7	39	0	1	0·02	− 0·61	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	3	0·39	− 0·58	*	*	*	*
	Pembroke	50	39	48·9	44·1	46·5	+ 4·2	32	0	3	0·05	− 0·62	7·2	− 11·4	11	− 17
	Clifton	56	35	50·9	42·8	46·9	+ 6·2	34	0	4	0·07	− 0·59	*	*	*	*
	Bath	57	30	52·6	40·7	46·7	+ 5·4	38	4	2	0·02	− 0·58	9·8	—	15	—
	Arlington (N. Devon)	52	31	49·0	39·6	44·3	+ 3·7	26	7	3	0·35	− 0·68	*	*	*	*
	Cullompton Ⓜ	56	32	53·3	39·3	46·3	+ 5·4	41	8	1	0·01	− 0·72	17·9	+ 1·4	27	+ 2
	Falmouth	52	37	50·1	44·7	47·4	+ 3·6	38	0	3	0·10	− 0·87	8·3	− 11·7	12	− 17
	Plymouth	53	34	50·5	44·4	47·5	+ 4·7	39	0	3	0·13	− 0·62	7·8	− 10·9	12	− 16
9 IRELAND, N.	Malin Head	51	39	48·9	44·0	46·5	+ 4·8	32	0	7	0·48	− 0·05	*	*	*	*
	Edenfel (Omagh)	54	38	49·4	43·0	46·2	+ 7·3	29	0	4	0·78	+ 0·14	*	*	*	*
	Blacksod Point	53	37	50·1	43·1	46·6	+ 3·7	32	0	6	0·76	− 0·15	*	*	*	*
	Markree Castle	55	33	51·3	43·4	47·4	+ 7·0	38	0	4	0·70	− 0·05	3·0	− 12·6	5	− 19
	Armagh	56	38	52·2	44·9	48·6	+ 8·6	46	0	4	0·24	− 0·31	7·3	− 8·3	11	− 13
	Donaghadee	56	38	51·9	43·4	47·7	+ 6·6	40	0	4	0·18	− 0·40	*	*	*	*
10. IRELAND, S.	Dublin	59	39	54·2	47·6	50·9	+ 8·5	62	0	2	0·03	− 0·45	9·3	− 8·2	14	− 12
	Birr Castle	57	30	52·3	42·6	47·5	+ 6·7	39	0	3	0·11	− 0·43	7·1	− 9·3	11	− 14
	Kilkenny	57	33	53·0	42·1	47·6	+ 5·9	39	0	2	0·05	− 0·58	*	*	*	*
	Waterford	54	36	51·4	44·0	47·7	+ 5·7	40	0	0	0·00	− 0·85	*	*	*	*
	Roche's Point	54	39	51·7	45·6	48·7	+ 5·0	47	0	4	0·05	− 0·98	*	*	*	*
	Valencia	56	33	52·1	44·3	48·2	+ 3.5	43	0	5	0·25	− 0·99	9·8	− 7·9	15	− 12
	Killarney	57	33	54·6	44·5	49·6	+ 6·3	53	0	4	0·49	− 0·77	*	*	*	*
	Foynes	58	41	53·2	44·6	48·9	+ 6·1	48	0	3	0·11	− 0·65	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	43	51·9	47·1	49·5	+ 3·3	53	0	1	0.02	− 0·66	8·6	− 12·7	13	− 19
	Jersey	52	35	50·1	43·1	46·6	+ 3·3	32	0	2	0·04	− 0·58	11·8	− 11·0	17	− 16

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

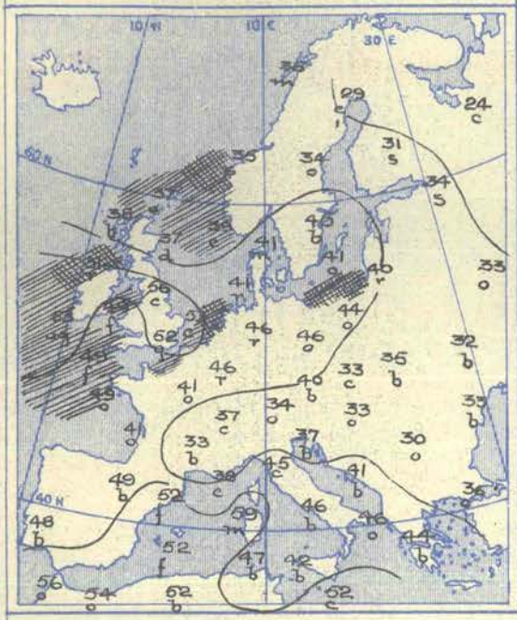
For additional Reports of Sunshine, see last page.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

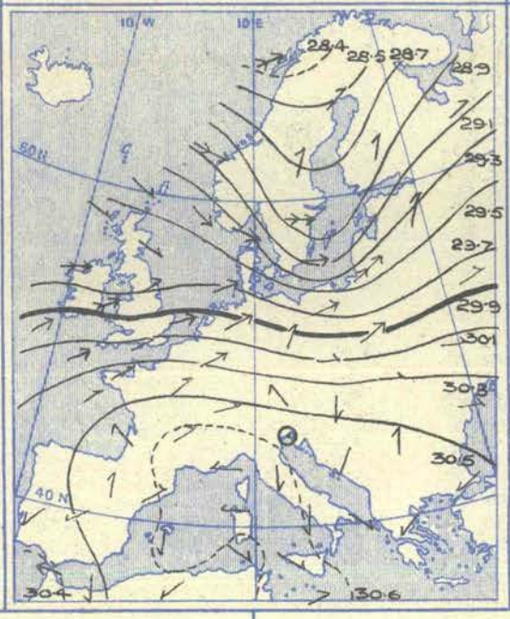
Erratum.—Douglas.—In the report ending January 24th, the Rainfall values at Douglas were in error. The correct figures are 6 days, 1·13 ins., + 0·19 in.

Sunday, 8th February, 1903.

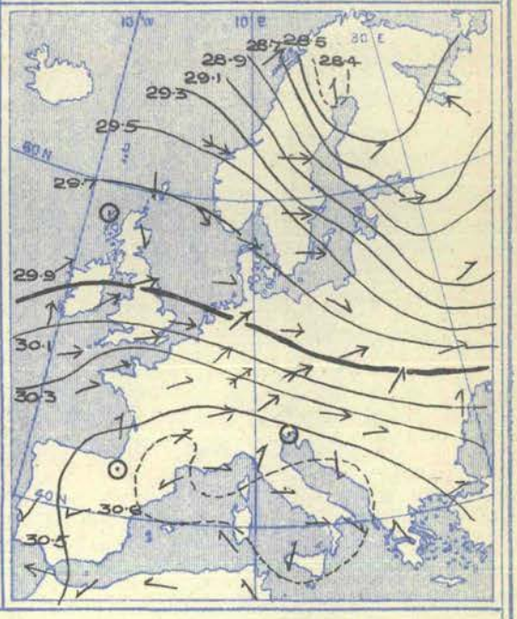
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull generally, but fine and bright in Portugal, the south-west of France, and at most Italian stations. Rain falling in Scotland, in some English and Irish localities, at Cape Gris Nez, Brussels, Fanö, and on the north German coast, and snow at Christiansund, St. Petersburg, and in Finland. Rain experienced later in most parts of Ireland, England, and Germany, and heavy sleet, snow, or rain in Scotland—1·05 ins. at Aberdeen, and 1·6 ins. at Leith.

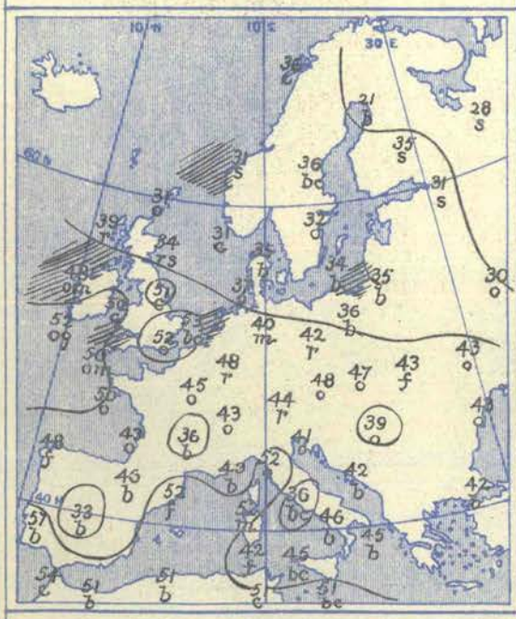
Temperature risen in most regions, but fallen in Scotland. 8 a.m. readings highest, 59° at Sanguinaire, 56° at San Fernando and North Shields, 54° at Parsonstown, and 53° at Bath. Lowest, 24° at Archangel, 29° at Haparanda, a little above the freezing point over the greater part of eastern and northern Europe, and 35° at Leith and Rome. Rising to 57° later at Oxford and Parsonstown, 59° at North Shields, Biarritz, and Tunis, 61° at Patras, 62° at Malta, 63° at Algiers, and to 64° at La Calle.

Wind strong to a gale from South-West in Ireland and Wales, and fresh from the same quarter over England. Light from West or North-West in Scotland, gales from same quarters prevailing over Scandinavia, and from South in Finland. A light and irregular anticyclonic circulation shown over Italy and southern Europe generally, but a strong Easterly wind prevailing at San Fernando. No great change as a whole during day, but wind increasing to a gale from the South-Westward in Germany and Austria-Hungary.

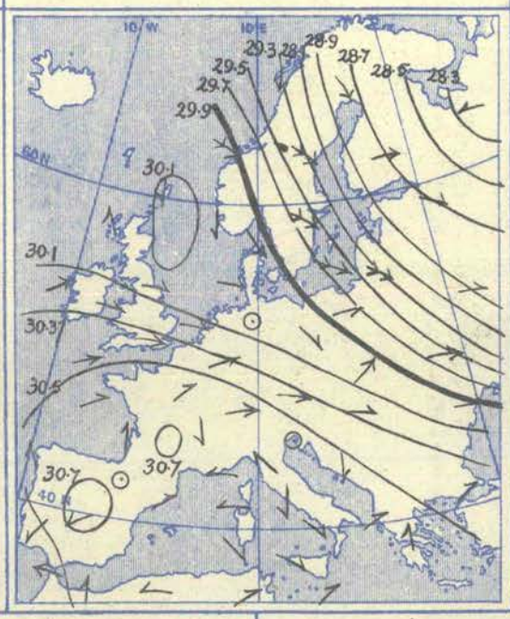
Barometer at 8 a.m. ranging from 30·5 ins. to 30·6 ins. and upwards in a large anticyclone covering the Mediterranean and southern Europe, to below 29·6 ins. in a secondary disturbance over Scotland, and to below 28·4 ins. in a large system over Lapland. Latter travelling eastwards later, and barometer rising quickly over Scandinavia. Very little modification within the anticyclonic area. Gradients increasing over Europe generally, but decreasing over our Islands.

Monday, 9th February, 1903.

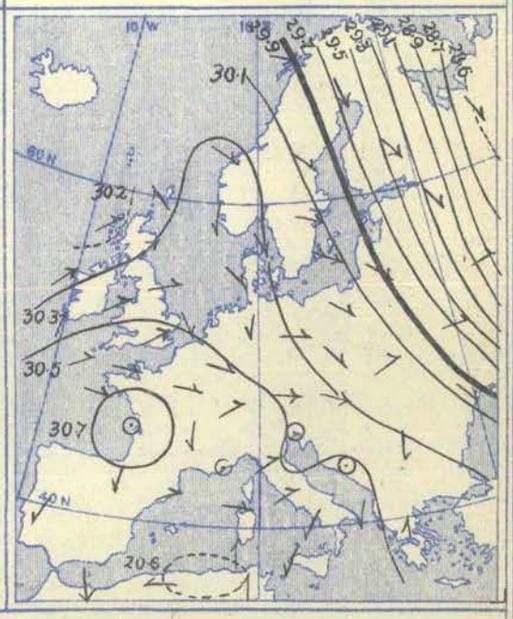
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in various parts of Sweden, the Baltic regions of Germany, and over southern Europe and the Mediterranean. Cloudy or overcast elsewhere, rainy at Berlin, Munich, and over the Netherlands, rain or sleet falling in Scotland, and snow at Christiansund and in the north of Russia. Fog prevailing at Corunna, Pembroke, and Lorient. Slight rain experienced on our extreme west and north-west coasts later, and considerable amounts of snow or rain in several parts of central Europe.

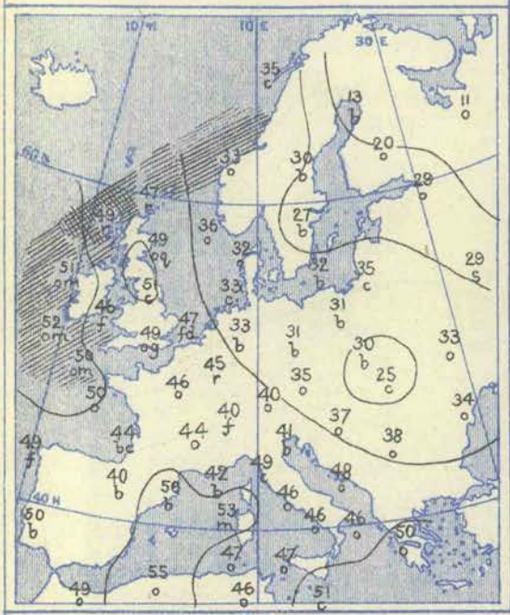
Temperature risen over south Germany, Austria Hungary, and southern Russia; changed irregularly elsewhere. Readings at 8 a.m. highest, 54° at San Fernando, 53° at Yarmouth, about 50° over Ireland and England generally, 52° at Leghorn, 51° at Lisbon. Lowest, 21° at Uleaborg, 28° at Archangel, 29° at Karlstad, 32° at Limoges, 33° at Madrid, and 34° at Aberdeen. Rising during day to 57° at Yarmouth and Oxford, 61° at Malta, 63° at Barcelona, 64° at Oporto and Oran, and 69° at Perpignan.

Wind in morning Southerly, light, to South-Westerly, strong, in Ireland, Westerly, fresh, over England, and South-Easterly, light, in Scotland. Strong to a gale from between North-West and West over Scandinavia, the Baltic, and Russia. Light and anticyclonic over southern Europe. No decided change during day over our area as a whole, but wind veering somewhat in Scotland.

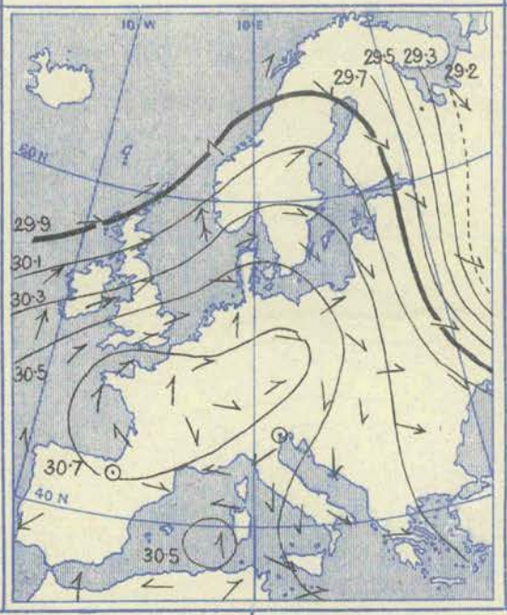
Barometer in morning ranging from above 30·7 ins. in a complex anticyclone over central Spain and the south-west of France, and above 30·6 ins. in an irregularly-shaped area over Italy and the Mediterranean, to 30·1 ins. and upwards in a small anticyclone off the north-east of Scotland, to about 29·9 ins. in a depression off the Hebrides, and to below 28·3 ins. in a very large disturbance having its centre near Archangel. Latter system moving away quickly eastwards later, and barometer rising rapidly over all the northern regions, and slowly over the United Kingdom. Southern anticyclone spreading northwards.

Tuesday, 10th February, 1903.

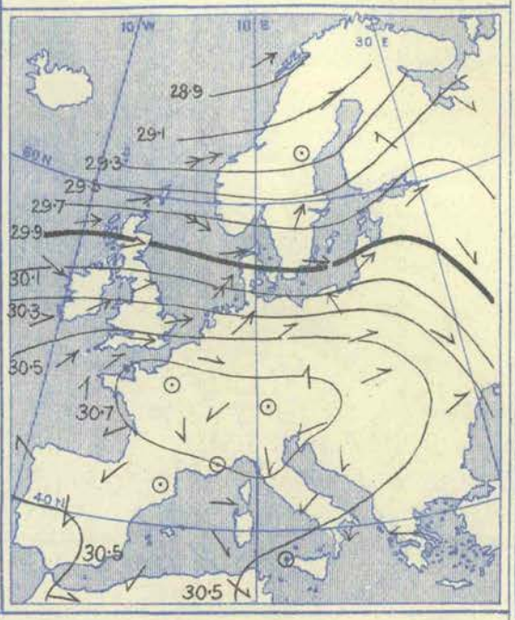
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over Sweden, the northern districts of Germany, and at many French and Spanish stations. Rainy in the Hebrides and Shetlands, and at Brussels, slight drizzle falling at Oxford and Yarmouth, and snow at Moscow. Slight rain at several of our own northern stations later, and heavier falls of rain or snow over Scandinavia and Finland.

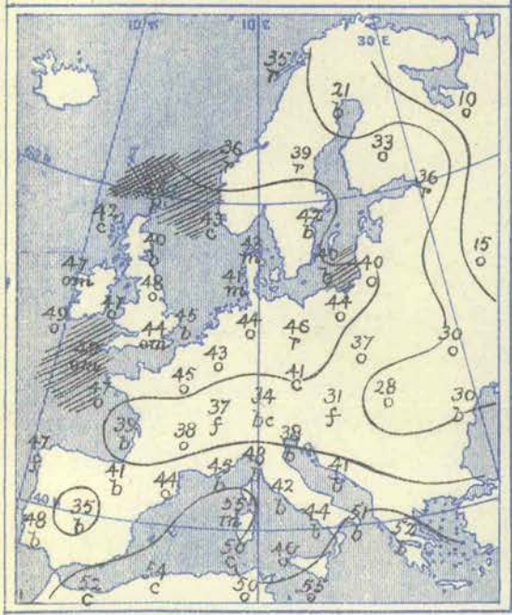
Temperature risen quickly in Scotland, fallen over Sweden, Finland, and Russia. Readings at 8 a.m. highest, (1) 58° at Oporto, (2) 55° at Algiers, (3) 53° at Parsonstown, 52° at Leith. Lowest, 11° at Archangel, 13° at Ulearborg, 27° at Stockholm and Karlstad, 28° at Breslau, and 33° at Christiansund and Fanö. Rising subsequently to 57° at Parsonstown and Wick, above 60° in the Riviera and the extreme south generally; highest reading of all being 68° at Perpignan. Remaining low over central Europe; maximum only 32° at Lemberg.

Wind in morning Southerly or South-Westerly over our Islands, and the major portion of north-western Europe; drawing into West in Sweden, and into North-West over Russia. Moderate or light in force as a whole, but strong at several of our own north-western stations, and strong to a gale in the south-west of Norway. Light and anticyclonic airs prevailing over the central and southern countries. Veering later over the United Kingdom, and increasing somewhat in force, and gales also becoming general over Norway.

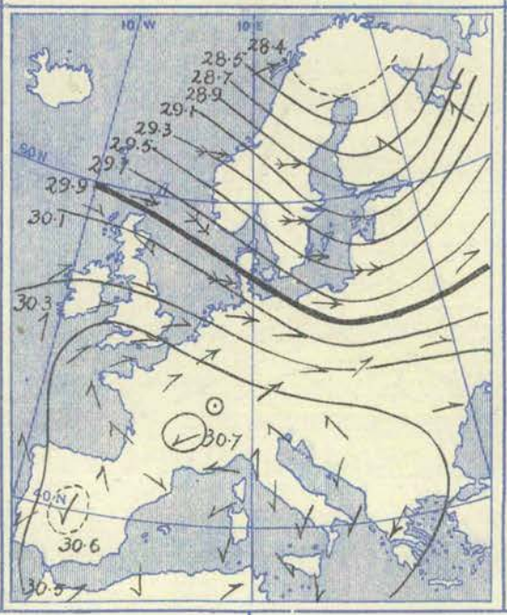
Barometer at 8 a.m. ranging from 30·7 ins. and upwards in the central portion of an anticyclone lying over France and Germany, to less than 29·9 ins. off the north of Scotland, and to below 29·2 ins. over the north-east of Russia. Rising quickly later in last-named region, but falling rapidly over the north of Scandinavia, and to a lesser extent over our own northern districts. No important change within the high-pressure area.

Wednesday, 11th February, 1903.

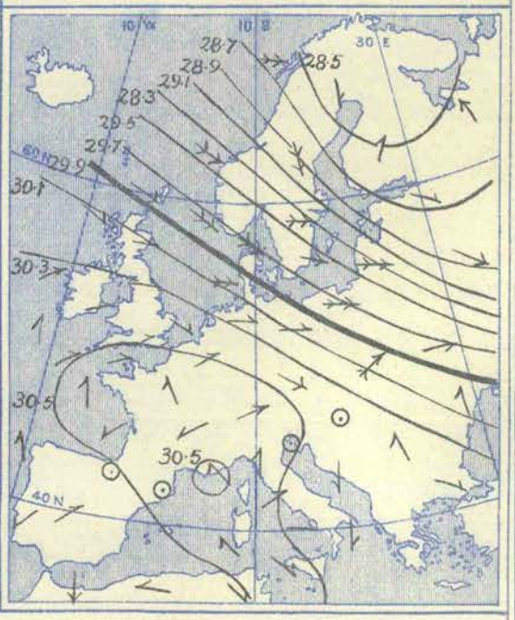
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull generally, but fine over Italy, Spain, and the south of France. Showery in the Shetlands, and rainy along the west coast of Norway, at Hernösand, St. Petersburg, and over parts of north Germany. Snow falling at Hangö. Rain falling later over our western and northern districts, and snow or rain in various parts of northern and central Europe.

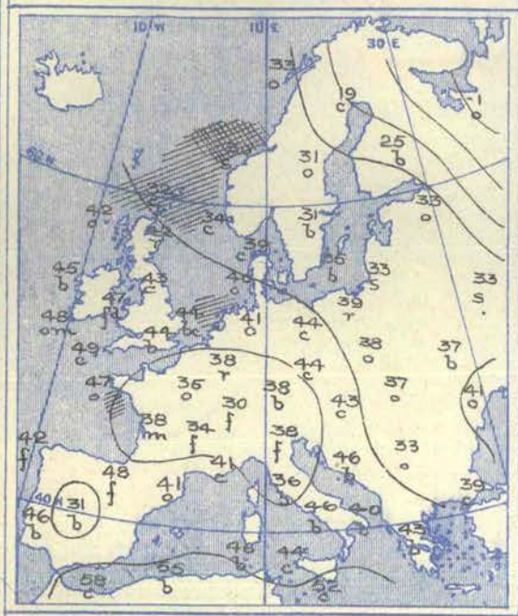
Temperature risen in most northern and fallen in most southern regions. Readings at 8 a.m. highest, 55° at Malta and Sanguinaire, 52° at Patras, 50° at Cape Sicié and Roche's Point. Lowest, (1) 10° at Archangel, 15° at Moscow, and 21° at Haparanda; (2) 31° at Vienna, 32° at Cracow; (3) 33° at Pesaro, and 37° at Florence; (4) 35° at Madrid. Rising during day to 56° in London, 59° at Nice and Malta, 61° at Palermo and in Algeria, and 63° at Lisbon. Exceeding 40° at most Swedish stations, and touching 45° at Stockholm.

Wind in morning Southerly in the north-west of Spain, and along our own extreme western coasts. Mainly Westerly over Great Britain, Scandinavia, the Baltic, and Germany, South-Westerly at Moscow, and South-Easterly at Archangel. Strong to a gale in force over Scandinavia, Denmark, and the Baltic, fresh to light elsewhere. Light and anticyclonic over central and southern Europe. Very little change during day.

Barometer fallen in most regions—as much as 1·45 ins. in the north of Sweden. Readings at 8 a.m. highest, 30·6 ins. to 30·7 ins. in an anticyclone embracing France, south Germany, the north of Italy and Corsica, and above 30·6 ins. over central Spain. Lowest, 28·4 ins. and less in a deep and very large depression having its centre over Lapland. Gradients very steep over the northern half of the Continent. Northern disturbance travelling eastwards later, and southern anticyclone decreasing somewhat in energy. Barometer falling very quickly over Russia.

Thursday, 12th February, 1903.

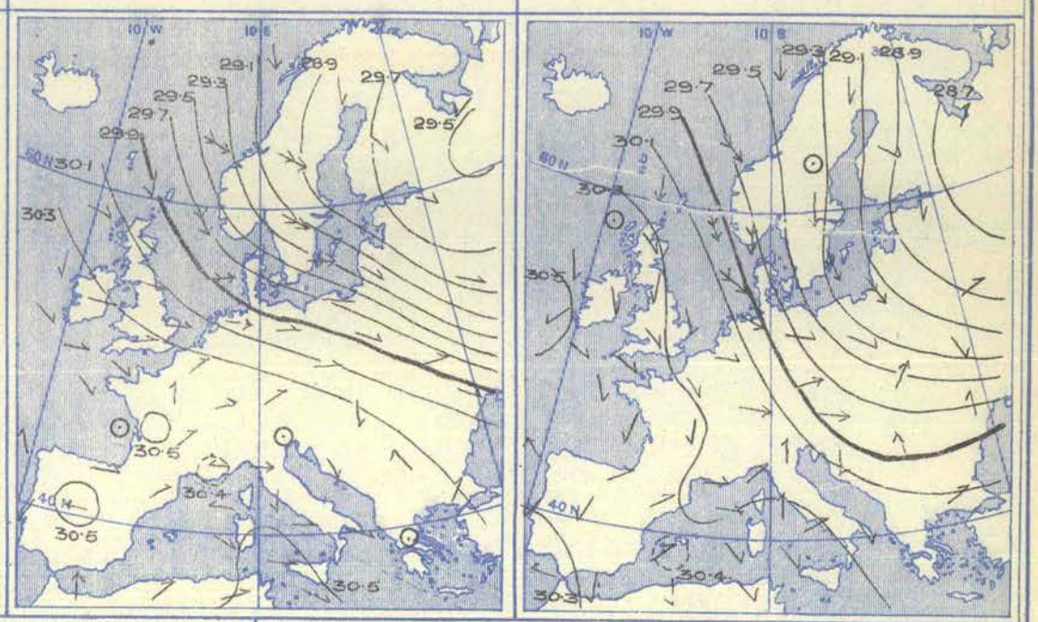
Temperature and Weather. 8 a.m.



Weather in morning cloudy or dull over western, northern, and central Europe generally, but fine in the south of Sweden; slight rain falling at several of our own western and northern stations, sleet at Wick, and snow at Christiansund, Memel, and Moscow. Fine over southern Europe as a whole, but fog reported over the south and east of France, and the northern parts of the Adriatic. Rain falling later at several of our western and northern stations, and also in Germany and Austria, and snow in many parts of northern Russia.

Temperature fallen in most countries, but risen over northern Italy, Austria, and the central and southern parts of Russia. Morning readings highest, 58° at Oran, 57° at Sanguinaire, and 55° at Algiers; above 45° at most of the Mediterranean stations, and also in the western parts of the United Kingdom. Lowest, −1° at Archangel, 19° at Haparanda, and 25° at Uleaborg and Kuopio; below the freezing point over northern Europe generally, and also in some parts of central France. Rising during day to 50° and upwards in many parts of England and Ireland, and to 54° at Oxford; exceeding 60° over Spain and the southern parts of France and Italy, and reaching 64° at San Fernando.

Barometer and Wind. 8 a.m. and 6 p.m.

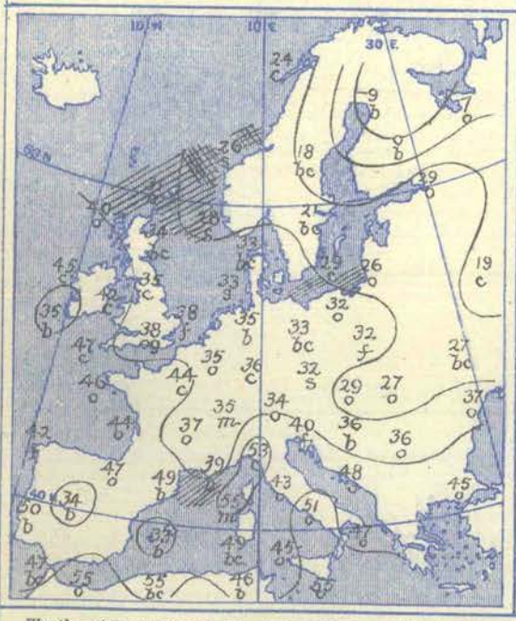


Wind light to moderate from the Westward or North-Westward in these Islands, and strong to a gale from the same quarters over the northern parts of the Continent generally. Light and rather variable over France and the southern countries. Subsequently veering to the Northward in many parts of north-western and northern Europe, but continuing to blow with the force of a gale over Scandinavia, Denmark, and the Baltic.

Barometer highest, 30·5 ins. and upwards over the central parts of France, Spain, and the Mediterranean; 30·4 ins. and upwards in an anticyclone covering the whole of France and southern Europe, and extending over our own extreme south-west coasts. Lowest, 28·5 ins. and less in a large and deep cyclonic system, with its centre over northern Russia; gradients steep over northern Europe generally, and especially over western and central Russia. Anticyclone extending northwards later over the whole of the United Kingdom; cyclonic disturbance over Russia travelling eastwards.

Friday, 13th February, 1903.

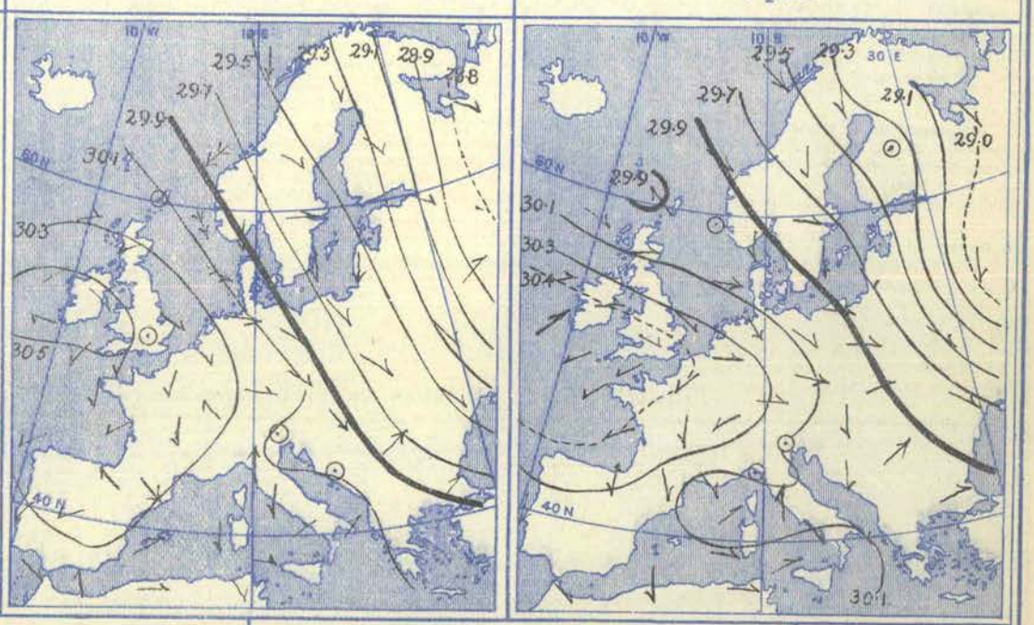
Temperature and Weather. 8 a.m.



Weather at 8 a.m. very cloudy or overcast as a whole, but fine in Finland, several parts of the United Kingdom, Spain, and over the western portion of the Mediterranean. Snow falling on the west coast of Norway and at Fanö. Some rain later over our own northern and western districts (0·49 in. at Sumburgh Head), and slight rain or snow over most of the central and northern countries. Sky becoming very clear over England.

Temperature fallen generally, but risen over Italy and at several French and Algerian stations. Readings at 8 a.m. ranging from 55° at Malta, Sanguinaire, and western Algeria, and 50° at Lisbon, and 47° at Scilly, to about 30° over central Europe, 0° zero at Kuopio, and to −9° at Uleaborg. Rising later to 50°, or slightly higher, at some of our western and southern stations, to nearly 60° in Italy and the Riviera, and to 68° at Nemours and Algiers. Not exceeding 32° at some German stations and Cracow, and remaining much below it over Russia and Sweden.

Barometer and Wind. 8 a.m. and 6 p.m.

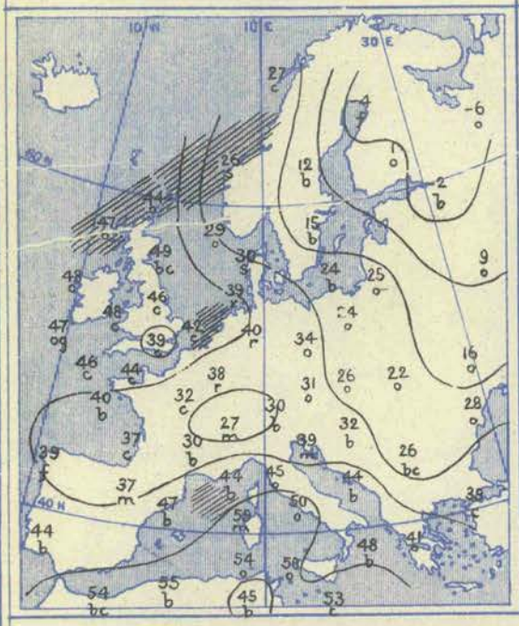


Wind in morning Northerly or North-Westerly in nearly all parts of Europe, but Westerly in Scotland, North-Easterly on our southern coasts and the west of France, and cyclonic around the Gulf of Genoa. Very light over our Islands, France, and the more southern regions, but strong or fresh over the central countries, and strong to a gale over Norway and Denmark. Gale subsiding during day, but no general change in direction except in the Shetlands, where wind became South-Easterly.

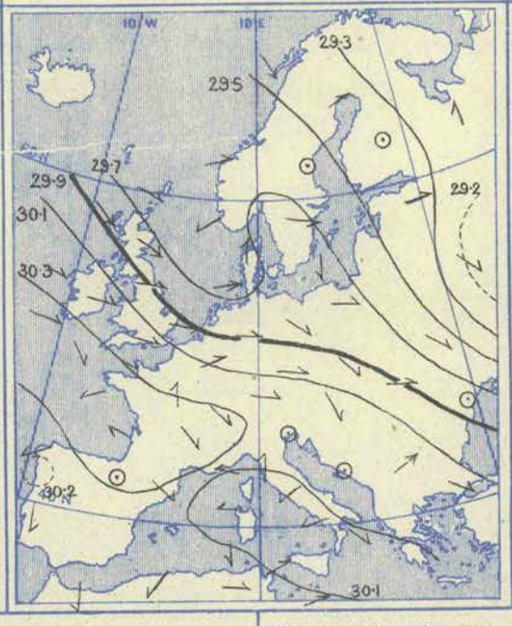
Barometer fallen over the eastern and southern countries, risen in the extreme north and north-west. Readings at 8 a.m. ranging from 30·5 ins., and upwards, in an anticyclone extending from the Atlantic across Ireland to the south-east of England, to less than 30·1 ins. in a depression over the Riviera, and to below 28·8 ins. over the north-east of Russia. No very important change as a whole later, but a new disturbance appearing off the north of Scotland, and barometer falling somewhat over our Islands generally, and rather quickly in north of Scotland.

Saturday, 14th February, 1903.

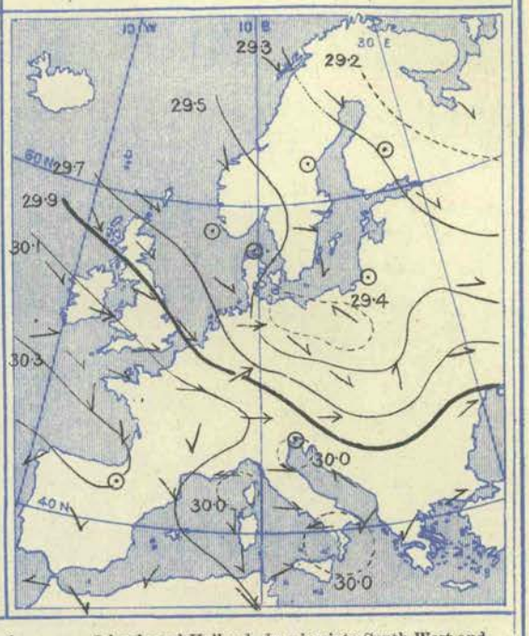
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in Sweden and many parts of southern Europe and Algeria; cloudy or overcast in almost all other regions, with rain at Malin Head, Brussels, Fanö, and Frankfurt, and snow at Christiansund, Skagen, Copenhagen, Swinemünde, and Breslau. Slight rain later over our northern and eastern districts, and considerable falls of rain or snow on the eastern and southern shores of the North Sea, over Germany, and Russia.

Temperature risen over our Islands, fallen in most parts of the Continent. Readings at 8 a.m. highest, 59° at Sanguinaires, 53° at Malta, 50° at Rome, 49° at Leith. Lowest, -6° at Archangel, -2° at St. Petersburg, -1° at Haparanda, +14° at Kharkov, 23° at Warsaw, 30° at Lyons and Le Mans, 39° in London, and 40° at Oxford. Maxima during day again exceeding 50° in various parts of our Islands, and 60° at many stations bordering the Mediterranean. Frost continuing all day over northern and eastern Europe.

Wind North-Westerly or Westerly over our Islands and Holland, drawing into South-West and South over Denmark, and into North-East at Skudesnaes. Fresh or strong on our northern coasts, and also in Holland and Denmark. Light or moderate from some Westerly or North-Westerly point in most other parts of our area, but light and irregularly cyclonic over Italy and its neighbourhood. Wind increasing greatly in force from the Westward or South-Westward over central Europe later, and shifting to the Eastward at Neu-Fahrwasser. Veering to North-West in Denmark.

Barometer risen over the eastern and south-eastern countries, fallen elsewhere—most in our own north-eastern districts, Holland, and Denmark. Readings at 8 a.m. ranging from 30·3 ins. and above in an anticyclone stretching south-eastwards from the Atlantic to the east of France; to 29·6 ins. in a depression over the north-eastern portion of the North Sea, and to less than 29·2 ins. over central Russia. North Sea depression moving south-eastwards later and increasing in depth. No very important change within the anticyclonic area.

IV.—GENERAL NOTES, etc.

This week has been marked by some exceedingly rapid changes in barometric pressure over the most northern countries, and by comparatively little variation in the southern regions. The former changes were brought about by a series of unusually large and deep cyclonic systems, which passed in a general easterly direction over Scandinavia and Russia, and produced a succession of very strong winds and gales over all the northern, and, at times, over the central countries. During the earlier part of the week, gales from the South-Westward were very common over our own western and north-western districts, but these were mainly caused by the secondaries to the larger disturbances.

Over the Mediterranean and southern Europe the barometer was high, and the distribution anticyclonic until towards the end of the period, when the highest pressures became located more to the westward and north-westward, and some shallow disturbances appeared over the Gulf of Genoa and its vicinity. Quite at the close of the period a depression, which had moved south-eastwards over the North Sea, lay over Germany, and a complete cyclonic circulation of moderate to strong winds was shown.

With the exception of some heavy falls of rain and snow over Scotland at the beginning of the week, and one or two later on over Norway, the amount of precipitation has been both inconsiderable and infrequent. In many southern regions the week was rainless. Temperature has been high for the time of year over all the northern countries—especially over the United Kingdom. In the extreme north the changes have occasionally been very rapid.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the reading at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Belgium, and Holland; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; at 9.25 a.m. in Spain, and 9 36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands; 4.36 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.25 p.m. in Spain; 6.51 p.m. in Algeria; 6·59 p.m. in Russia; 7 p.m. in Germany, Denmark, Norway, and Sweden; 8 p.m. in Austria and Italy, and 9 p.m. in Holland and Belgium. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 32.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	7·7	- 5·6	13	- 9
STRATHPEFFER SPA	4·4	- 10·6	7	- 17
EDINBURGH	4·2	- 9·5	7	- 15
COCKLE PARK	6·7	—	11	—
NEWCASTLE-ON-TYNE	4·9	—	8	—
YORK	15·0	+ 1·1	23	+ 2
CROMER	11·5	—	17	—
LOWESTOFT	11·7	—	18	—
HOLLESLEY BAY	16·9	—	25	—
DUNMOW	18·1	—	27	—
SHEFFIELD	13·2	—	20	—
WORKSOP	10·9	- 3·3	17	- 5
THURCASTON	14·5	- 0·2	22	0
MARGATE	16·1	- 1·0	24	- 2
BROADSTAIRS	17·7	—	26	—
RAMSGATE	—	—	—	—
EASTBOURNE	11·9	- 6·4	18	- 10
BRIGHTON	12·3	- 6·3	18	- 10
WORTHING	11·5	—	17	—
BOGNOR	13·6†	—	20†	—
WATERGATE PARK	10·9	—	16	—
WESTBOURNE	11·2†	- 7·9	17†	- 12
VENTNOR HOSPITAL	6·0	- 13·5	9	- 20
BOURNEMOUTH	13·6	—	20	—
MARLBOROUGH	15 8	+ 1·2	24	+ 2
SOUTHPORT	15·4	—	24	—
RHYL	13·1	—	20	—
COLWYN BAY	—	—	—	—
ABERDOVEY	6·5†	—	10†	—
TENBY	3·3	- 16·3	5	- 24
TORQUAY	17·3	- 0·5	26	- 1
NEWQUAY	9·7	- 9·7	14	- 14
GUERNSEY	10·4†	- 11·1	15†	- 16

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 7.] *Fourth Series.* WEEK ENDING SATURDAY, FEBRUARY 21ST, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 38.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	28	47·7	38·1	42·9	5 above	23	+15	11	−24	79	+ 32	205	− 48
	1. SCOTLAND, EAST	57	27	48·3	37·4	42·9	5 above	26	+16	13	−27	108	+ 52	224	− 68
	2. ENGLAND, N.E.	57	31	49·6	38·4	44·0	5 above	29	+18	10	−23	128	+ 69	157	− 93
	3. ENGLAND, EAST	61	22	50·5	35·6	43·1	4 above	35	+22	18	−19	146	+ 80	159	−120
	4. MIDLAND COUNTIES	59	24	50·4	38·1	44·2	5 above	32	+17	11	−25	145	+ 66	168	−114
	5. ENGLAND, SOUTH	61	22	50·1	39·9	45·0	5 above	30	+13	6	−21	151	+ 57	110	−104
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	54	38	48·9	42·0	45·5	6 above	25	+14	0	−28	111	+ 40	134	− 74
	7. ENGLAND, N.W.	57	32	49·9	40·3	45·1	5 above	29	+17	5	−22	143	+ 71	134	− 69
	8. ENGLAND, S.W.	59	25	51·0	41·6	46·3	4 above	32	+13	1	−21	177	+ 61	80	− 80
	9. IRELAND, NORTH	57	38	51·1	42·5	46·8	6 above	34	+18	0	−24	136	+ 38	120	− 59
	10. IRELAND, SOUTH	58	35	52·0	43·5	47·8	5 above	41	+18	0	−17	201	+ 53	71	− 64
	— CHANNEL ISLANDS	56	39	51·8	43·4	47·6	3 above	39	+13	0	− 9	243	+ 74	33	− 36

Rainfall.

	DISTRICTS. (See p. 38.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	22	11 more	37	+ 4	13·5	+ 5·3
	1. SCOTLAND, EAST	3	7	1 more	28	+ 1	6·7	+ 2·5
	2. ENGLAND, N.E.	3	3	1 less	22	− 3	2·4	− 0·5
	3. ENGLAND, EAST	2	1	3 less	17	−10	1·5	− 1·4
	4. MIDLAND COUNTIES	3	3	2 less	20	− 5	2·2	− 1·4
	5. ENGLAND, SOUTH	2	1	5 less	24	− 2	2·2	− 1·7
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	14	3 more	34	+ 4	11·0	+ 3·1
	7. ENGLAND, N.W.	4	9	3 more	29	+ 1	5·1	+ 0·6
	8. ENGLAND, S.W.	3	2	6 less	29	− 1	5·0	− 1·0
	9. IRELAND, NORTH	4	5	1 less	34	+ 1	6·2	+ 1·4
	10. IRELAND, SOUTH	3	6	2 less	33	+ 1	6·4	+ 0·1
	— CHANNEL ISLANDS	2	less than half	6 less	30	− 1	3·5	− 1·5

Bright Sunshine.

	DISTRICTS. (See p. 38.)	For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	− 9	9	−13	39	− 27	10	− 7
	1. SCOTLAND, EAST	9	− 9	13	−13	48	− 41	12	−11
	2. ENGLAND, N.E.	13	− 8	19	−12	69	− 22	17	− 5
	3. ENGLAND, EAST	26	+ 6	37	+ 9	107	+ 7	25	+ 2
	4. MIDLAND COUNTIES	17	+ 1	24	+ 2	81	− 1	19	0
	5. ENGLAND, SOUTH	23	+ 6	33	+ 8	93	− 1	21	0
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	−11	7	−16	40	− 38	10	− 9
	7. ENGLAND, N.W.	13	− 6	19	− 8	79	− 1	19	0
	8. ENGLAND, S.W.	16	− 5	23	− 8	81	− 26	19	− 6
	9. IRELAND, NORTH	9	− 8	13	−12	58	− 31	14	− 8
	10. IRELAND, SOUTH	9	−10	13	−14	68	− 36	16	− 8
	— CHANNEL ISLANDS	24	0	34	0	104	− 20	23	− 4

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period was again of a very unsettled character, with frequent and heavy rain over the north and west of Scotland. Further to the southward the conditions were quieter and less rainy, while over the southern and eastern districts of England and in the Channel Islands the weather was mostly fair and dry. Thunder and lightning were experienced at some Scotch stations towards the end of the week.

Temperature was again above the mean, the excess ranging from 3° in the Channel Islands and 4° in England S.W. and E., to 6° in Scotland W. and Ireland N. The highest of the maxima were recorded on either Thursday or Friday, and ranged from 61° in England S. and E. (at Southampton and Cambridge), to 56° in the Channel Islands, and to 54° in Scotland W. The lowest of the minima occurred on Wednesday at nearly all English stations, but on various days over Ireland and Scotland. They were as low as 22° in England S. and E., 24° in the Midland Counties, and 25° in England S.W., while elsewhere they ranged from 27° in Scotland E., to 35° in Ireland S., 38° in Scotland W. and Ireland N., and to 39° in the Channel Islands.

Rainfall was much more than the mean in Scotland N., and rather more in Scotland E., Scotland W., and England N.W., but less in all other parts of the Kingdom. In the south and east of England and in the Channel Islands the fall was very trifling. At Fort William on the 19th and 20th the falls were 2·07 ins. and 1·37 ins. respectively.

Bright Sunshine was deficient over the country as a whole, but exceeded it in England E., the Midland Counties, and England S., and was just equal to it in the Channel Islands. The percentage varied from 37 in England E., 34 in the Channel Islands, and 33 in England S., to 13 over Ireland, 9 in Scotland N., and 7 in Scotland W.

Barometer and Wind.—Soon after the commencement of the week a long and narrow ridge of high pressure extended from Spain northwards to the Shetlands, the wind being South-Easterly or Southerly over our western districts, and Northerly over the North Sea. By Tuesday, however, the barometer had begun to fall in the north-west, and during the remainder of the week large and deep cyclonic disturbances, moving north-eastwards over the Atlantic, gradually encroached more and more over our Islands, while the highest pressure became established over France and central Europe. The wind consequently shifted to the Southward or South-Westward very generally, increased in force, and, towards the end of the week, blew a fresh to strong gale on all our coasts.

207 | 90 Wy & S. Ltd
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 37 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head Ⓢ	49	32	43·9	35·7	39·8	+ 1·6	5	23	6	1·08	+ 0·33	*	*	*	*
	Stornoway	53	36	48·7	40·0	44·4	+ 5·3	25	6	6	2·14	+ 1·20	6·0	- 10·6	9	- 16
	Wick Ⓢ	54	33	45·6	36·0	40·8	+ 2·9	10	24	5	0·44	- 0·07	*	*	*	*
	Lairg Ⓢ	57	28	47·6	36·7	42·2	+ 6·7	24	15	3	1·08	+ 0·35	*	*	*	*
	Glencarron Ⓢ	55	33	48·8	36·3	42·6	+ 5·6	28	16	6	2·91	+ 1·23	*	*	*	*
	Fort Augustus Ⓢ	51	36	49·4	39·6	44·5	+ 6·2	28	7	4	2·39	+ 2·46	5·3	- 6·0	8	- 9
	Fort William	55	39	49·8	42·1	46·0	+ 7·0	28	0	5	4·35	+ 2·50	1·0	- 13·4	2	- 20
1. SCOTLAND E.	Nairn	57	27	49·1	36·9	43·0	+ 4·8	28	14	3	0·83	+ 0·44	*	*	*	*
	Aberdeen	57	33	48·6	37·0	42·8	+ 4·3	27	14	1	0·03	- 0·51	13·4	- 6·3	20	- 9
	Braemar Ⓢ	53	33	46·5	35·5	41·0	+ 6·2	13	26	3	1·02	+ 0·34	*	*	*	*
	Ochtertyre Ⓢ	53	34	48·4	39·0	43·7	+ 5·6	25	8	5	1·06	+ 0·21	*	*	*	*
	Leith Ⓢ	57	37	50·7	40·1	45·4	+ 5·4	32	5	4	0·56	+ 0·19	*	*	*	*
	Marchmont Ⓢ	51	30	46·7	36·1	41·4	+ 3·9	13	24	4	0·70	+ 0·12	6·3	- 11·7	9	- 17
2. ENGLAND, N.E.	Alnwick Castle	55	33	48·3	39·0	43·7	+ 5·2	25	8	4	0·34	- 0·20	*	*	*	*
	Durham	53	31	48·6	37·4	43·0	+ 4·7	26	13	3	0·24	- 0·16	13·2	- 4·4	19	- 6
	Shields	54	35	49·6	39·3	44·5	+ 5·0	29	8	4	0·29	- 0·09	*	*	*	*
	Scarborough Ⓜ	55	31	50·8	37·3	44·1	+ 4·6	34	13	3	0·61	+ 0·17	10·0	—	15	—
	Spurn Head	56	33	49·7	38·4	44·1	+ 4·8	30	10	2	0·14	- 0·20	*	*	*	*
	Fulbeck (Lincolnshire)	57	31	50·3	38·8	44·6	+ 6·3	32	9	2	0·13	- 0·24	25·2	—	36	—
3. ENGLAND, E.	Hillington Ⓜ	58	25	51·2	33·9	42·6	+ 3·7	38	23	2	0·09	- 0·35	21·6	+ 2·4	31	+ 3
	Yarmouth	57	28	48·7	34·3	41·5	+ 2·9	19	32	2	0·05	- 0·37	*	*	*	*
	Geldeston	58	23	51·2	33·8	42·5	+ 3·1	38	23	1	0·04	- 0·32	23·1	+ 3·3	33	+ 5
	Cambridge	61	25	52·9	35·5	44·2	+ 4·9	43	18	2	0·12	- 0·22	29·6	+ 10·0	42	+ 14
	Felixstowe	58	30	49·1	37·0	43·1	+ 3·8	29	14	1	0·01	—	31·6†	—	45†	—
	Rothamsted	57	22	50·1	35·6	42·9	+ 4·2	33	18	3	0·05	- 0·42	27·3	+ 8·9	39	+ 13
	Shoeburyness	58	30	50·4	39·1	44·8	+ 5·1	32	8	1	0·04	- 0·27	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	53	33	47·9	38·7	43·3	+ 5·3	23	9	4	1·39	+ 0·78	8·3	—	12	—
	Bawtry (Hesley Hall)	59	29	51·1	38·1	44·6	+ 5·3	35	11	2	0·25	- 0·13	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	58	28	51·1	38·9	45·0	+ 6·0	34	9	1	0·04	- 0·39	*	*	*	*
	Cheadle Ⓜ	55	28	48·4	37·1	42·8	+ 4·7	26	14	2	0·27	— 0·30	*	*	*	*
	Birmingham (Edgbaston)	58	30	49·8	39·2	44·5	+ 5·2	29	8	2	0·02	- 0·39	13·2	—	19	0
	Churchstoke Ⓜ	57	27	51·3	39·0	45·2	+ 6·2	35	8	3	0·18	- 0·42	21·2	+ 2·8	31	+ 4
	Hereford Ⓜ	59	28	50·8	39·2	45·0	+ 5·0	33	8	3	0·10	- 0·40	*	*	*	*
	Cirencester	59	24	51·5	34·9	43·2	+ 4·6	38	20	4	0·09	- 0·48	20·5	+ 1·0	29	+ 1
	Oxford	59	26	51·7	37·4	44·6	+ 4·6	38	13	2	0·02	- 0·42	20·9	+ 2·9	30	+ 4
5. ENGLAND, S.	London	60	27	52·7	37·3	45·0	+ 4·4	41	13	2	0·05	- 0·35	18·4‡	+ 7·3‡	26‡	+ 10‡
	Swarraton (Alresford) Ⓜ	59	22	50·4	37·0	43·7	+ 4·8	33	14	2	0·08	- 0·55	*	*	*	*
	Dungeness	54	38	49·0	41·0	45·0	+ 4·7	25	3	2	0·03	- 0·29	26·0	—	37	—
	Hastings (St. Leonards)	52	36	48·5	41·4	45·0	+ 4·5	24	2	2	0·02	- 0·49	21·3	- 0·5	31	- 1
	Southampton	61	28	52·5	40·6	46·6	+ 5·1	38	4	4	0·12	- 0·45	22·6	+ 2·6	32	+ 4
	Portland Bill	53	37	49·3	42·0	45·7	+ 2·9	26	0	3	0·03	—	*	*	*	*
	Shaftesbury Ⓜ	55	33	48·0	40·3	44·2	+ 4·9	23	5	1	0·01	- 0·62	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	54	39	49·5	42·5	46·0	+ 5·9	28	0	7	2·67	+ 1·07	*	*	*	*
	Glasgow	53	38	49·0	41·1	45·1	+ 6·0	25	3	4	0·88	+ 0·14	2·5	- 9·5	4	- 14
	Cally Ⓢ	51	39	49·0	41·1	45·1	+ 6·0	25	3	5	1·10	+ 0·14	*	*	*	*
	Douglas (Isle of Man)	50	41	48·0	43·1	45·6	+ 4·7	25	0	5	0·73	- 0·07	6·4	- 12·2	9	- 18
7. ENGLAND N.W.	Newton Reigny	52	36	48·3	38·7	43·5	+ 6·2	24	9	5	1·33	—	11·7	—	17	—
	Stonyhurst	53	33	47·9	39·0	43·5	+ 4·5	23	8	4	1·45	+ 0·62	8·8	- 7·5	13	- 11
	Blackpool Ⓜ	54	32	49·3	40·1	44·7	+ 5·2	27	5	4	0·76	+ 0·21	9·3	- 7·2	14	- 11
	Manchester (Prestwich)	54	34	49·4	39·8	44·6	+ 5·6	27	6	4	0·98	+ 0·43	9·2	—	13	—
	Liverpool Obsy. (Bidston)	55	33	50·4	40·3	45·4	+ 5·2	31	5	4	0·43	0·00	10·8	—	16	—
	Chester (Hawarden Bridge)	56	32	52·9	38·7	45·8	+ 4·6	40	9	2	0·30	—	*	*	*	*
	Llandudno Ⓜ	57	36	51·9	43·2	47·6	+ 5·6	39	0	5	1·49	+ 0·96	16·5	- 2·2	24	- 3
	Holyhead	50	39	48·9	42·4	45·7	+ 3·9	26	0	5	0·60	0·00	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	3	0·67	- 0·27	*	*	*	*
	Pembroke	56	39	50·1	43·9	47·0	+ 4·6	35	0	2	0·10	- 0·54	7·7	- 12·8	11	- 18
	Clifton	59	31	51·3	40·1	45·7	+ 4·5	34	5	2	0·01	- 0·62	*	*	*	*
	Bath	59	25	52·1	38·1	45·1	+ 3·7	38	11	2	0·12	- 0·44	20·5	—	29	—
	Arlington (N. Devon)	58	35	49·7	40·0	44·9	+ 4·2	29	6	3	0·19	- 0·81	*	*	*	*
	Cullompton Ⓜ	59	25	52·2	40·4	46·3	+ 4·9	37	4	3	0·06	- 0·64	17·2	- 1·4	24	- 2
	Falmouth	55	40	50·9	45·3	48·1	+ 4·1	43	0	3	0·05	- 0·88	15·3	- 6·6	22	- 9
	Plymouth	58	36	50·4	43·5	47·0	+ 4·1	35	0	3	0·10	- 0·60	19·2	- 1·5	27	- 2
9 IRELAND, N.	Malin Head	52	43	49·4	43·9	46·7	+ 5·0	33	0	4	0·52	+ 0·02	*	*	*	*
	Edenfel (Omagh)	57	38	51·1	40·7	45·9	+ 6·6	33	4	3	0·39	- 0·22	*	*	*	*
	Blacksod Point	53	41	51·6	44·0	47·8	+ 4·8	41	0	7	0·66	- 0·20	*	*	*	*
	Markree Castle	55	41	51·6	42·8	47·2	+ 6·4	36	0	4	0·67	- 0·03	6·1	- 10·9	9	- 16
	Armagh	56	40	53·2	41·2	47·2	+ 6·8	40	2	3	0·65	+ 0·11	11·7	- 5·1	17	- 8
	Donaghadee	57	41	49·9	42·4	46·2	+ 4·9	29	0	4	0·32	- 0·24	*	*	*	*
10. IRELAND, S.	Dublin	58	41	53·8	44·2	49·0	+ 6·4	49	0	3	0·53	+ 0·03	12·5	- 6·6	18	- 10
	Birr Castle	57	40	52·4	40·6	46·5	+ 5·2	37	4	3	0·80	+ 0·28	11·2	- 6·8	16	- 10
	Kilkenny	55	35	51·4	40·4	45·9	+ 4·1	34	4	3	0·48	- 0·12	*	*	*	*
	Waterford	51	42	49·3	44·0	46·7	+ 4·5	33	0	3	0·50	- 0·31	*	*	*	*
	Roche's Point	52	44	50·4	46·0	48·2	+ 4·2	43	0	6	0·56	- 0·44	*	*	*	*
	Valencia	56	44	53·0	45·9	49·5	+ 4·6	53	0	5	0·76	- 0·42	3·3	- 16·3	5	- 23
	Killarney	56	44	52·1	45·6	48·9	+ 5·4	48	0	2	0·27	- 0·93	*	*	*	*
	Foynes	57	41	53·8	41·6	47·7	+ 4·7	42	1	2	0·72	- 0·01	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	42	52·3	44·7	48·5	+ 2·8	46	0	2	0·03	- 0·60	8·7	- 14·9	12	- 21
	Jersey	56	39	51·3	42·0	46·7	+ 3·3	33	0	2	0·04	- 0·56	35·1	+ 10·2	49	+ 14

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

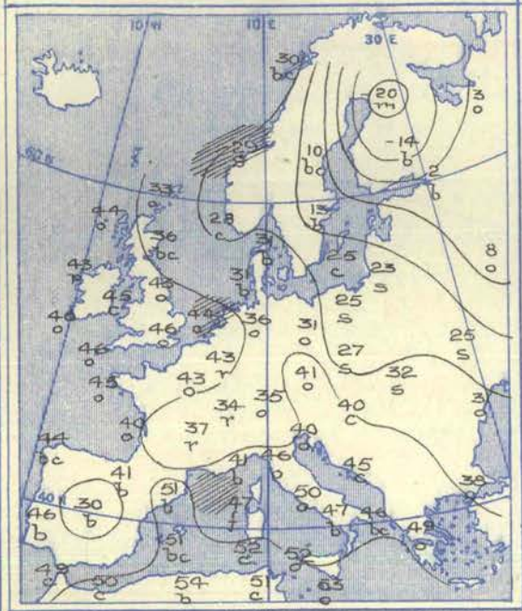
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster. For additional Reports of Sunshine, see last page.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 15th February, 1903.

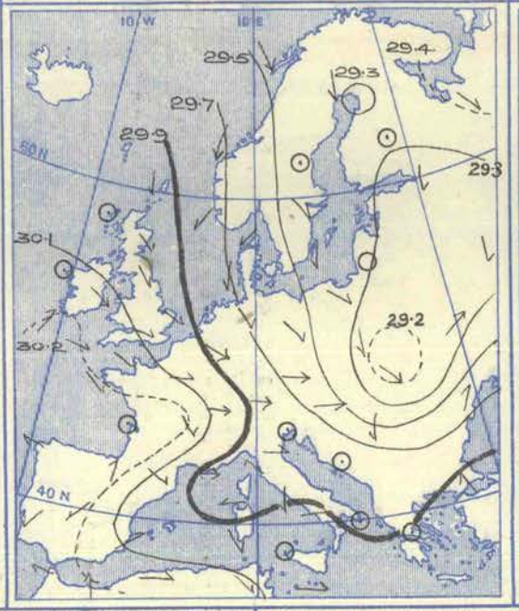
Temperature and Weather. 8 a.m.



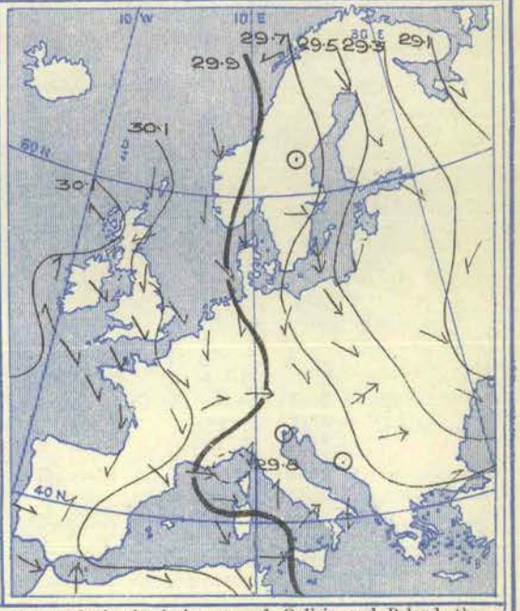
Weather at 8 a.m. fine and bright in most parts of Finland, Sweden, Denmark, and in southern Europe; cloudy or very dull elsewhere. Rainy at Leith, Brussels, in the east of France, and at Cracow, and snow falling at Christiansund, on the southern shores of the Baltic, and in many parts of central Europe. Slight rain falling later at various stations in the United Kingdom, and larger quantities of rain or snow in different Continental localities.

Temperature risen in most southern, and fallen in most northern, regions. Readings at 8 a.m. ranging from 54° at Algiers, and 53° at Malta, to 46° over the English Channel, to below 30° over most of the northern countries, to 3° at Archangel, −14° at Kuopio, and to −20° at Uleaborg. No higher than 30° at Madrid. Subsequently increasing to 50° at Donaghadee, 55° or above at many Italian stations, and in the south of France, to 66° at San Fernando and Algiers. Remaining below 32° all day over Scandinavia, Russia, and in some parts of central Europe.

Barometer and Wind. 8 a.m.



6 p.m.

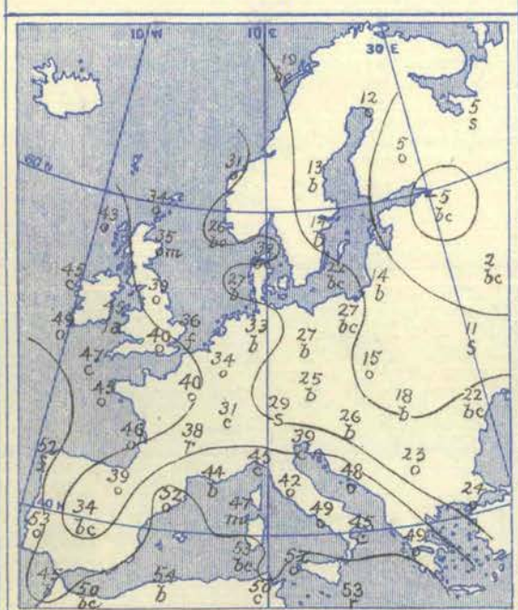


Wind at 8 a.m. showing a complete cyclonic circulation around Galicia and Poland, the Westerly and North-Westerly winds over Austria-Hungary being very strong in force. Light or moderate from West or North-West over the United Kingdom and France, fresh from the Northward in Sweden, and variable over the Mediterranean. Cyclonic circulation becoming transferred more to the Eastward by evening, and wind in south-eastern and eastern Europe veering to North-West or West. Northerly gale springing up at Wisby. Wind in our Islands decreasing in force, and becoming variable in direction.

Barometer at 8 a.m. highest, 30·2 ins. and upwards, in an anticyclone extending from the Atlantic, over the Bay of Biscay, to the east of France. Lowest, 29·2 ins., and less, in a disturbance over Poland. No higher than 29·3 ins. in the north of Finland, and below 29·9 ins. in an ill-defined system over the Gulf of Genoa and its vicinity. Polish depression travelling away quickly eastwards during day. Pressure increasing in most parts of north-western and central Europe, and decreasing in east. Anticyclonic area spreading Northwards over our Islands.

Monday, 16th February, 1903.

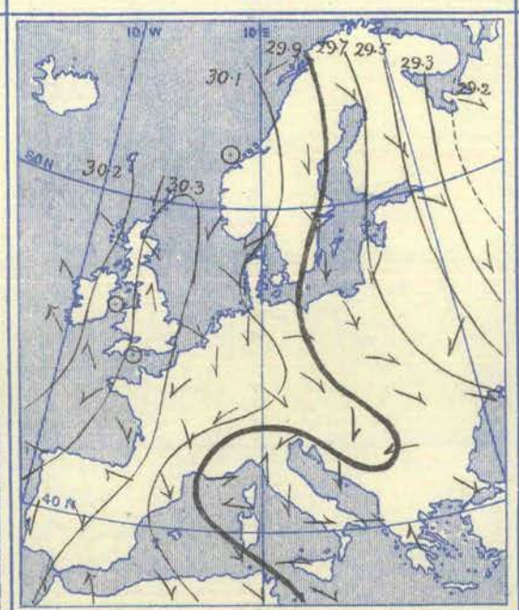
Temperature and Weather. 8 a.m.



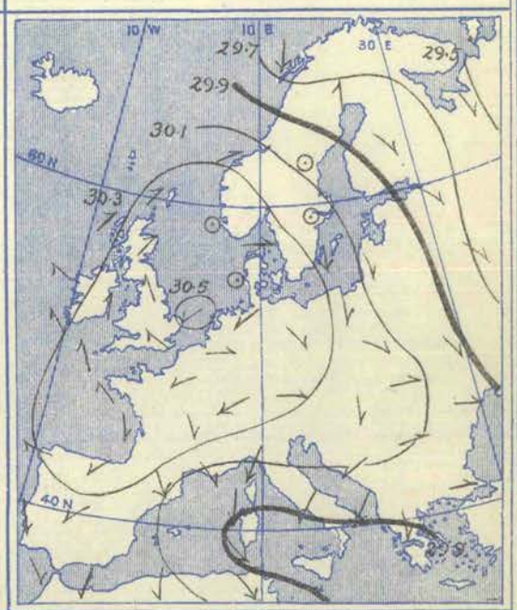
Weather at 8 a.m. cloudy or dull in most parts of our Islands, and along the Atlantic seaboard of the Continent, but fine and bright in most other regions. Rainy at Malin Head, Lyons, Limoges, and Malta, and snow falling at Archangel and Kiev. Slight rain subsequently experienced at some of our own western, northern, and southern stations, and slight snow or rain over Russia and Germany. Heavier rain in some Italian districts (1·06 ins. at Palermo) and a great quantity of snow (1·18 ins.) at Hapsanda.

Temperature fallen in most countries, but risen over Spain, Sweden, and Finland. Readings at 8 a.m. highest, 54° at Algiers, 53° at Malta, Cagliari, and Lisbon, 49° at Valencia Island. Lowest, −5° at St. Petersburg, +1° at Helsingfors, 2° at Moscow, 5° at Archangel, 19° at Bodö, 21° at Breslau, 26° at Skudesnaes, 31° at Belfort, and 34° at Nairn and Madrid. Exceeding 50° during day at some of our own extreme western and southern stations, 60° over Spain, and 70° over Algeria. Remaining below the freezing point all day over Russia, Sweden, and a good part of central Europe, and only rising to 50° at Cette and Brindisi.

Barometer and Wind. 8 a.m.



6 p.m.

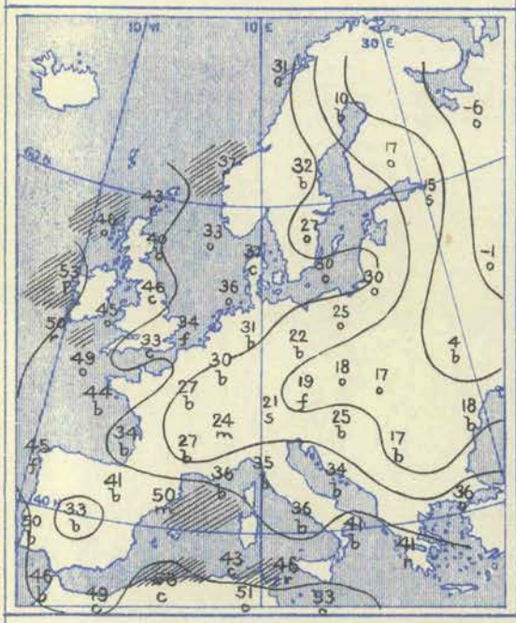


Wind in morning light or moderate from South-East or South over the western half of our Islands; light to moderate or fresh from some Northerly point in most other parts of our area, but drawing into West-North-West over central Europe, into East-North-East or East at Trieste and Nice, and into West at Palermo. No great change later; anticyclonic circulation becoming gradually established over the more western countries.

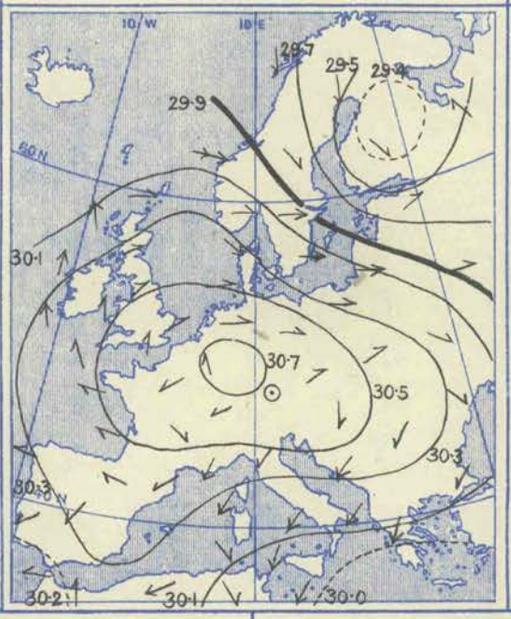
Barometer risen as a whole, but fallen over the Mediterranean, Turkey, and the eastern half of Russia. Readings at 8 a.m. ranging from above 30·3 ins. in a narrow ridge extending in a general northerly direction from the south-west of Spain to the Shetlands, to below 29·9 ins. in an ill-defined low-pressure area over Italy and its neighbourhood, and to 29·2 ins. and less over the north-east of Russia. Rising later in nearly all regions, and a large anticyclone forming over all the central districts of western Europe. Falling decidedly in Lapland.

Tuesday, 17th February, 1903.

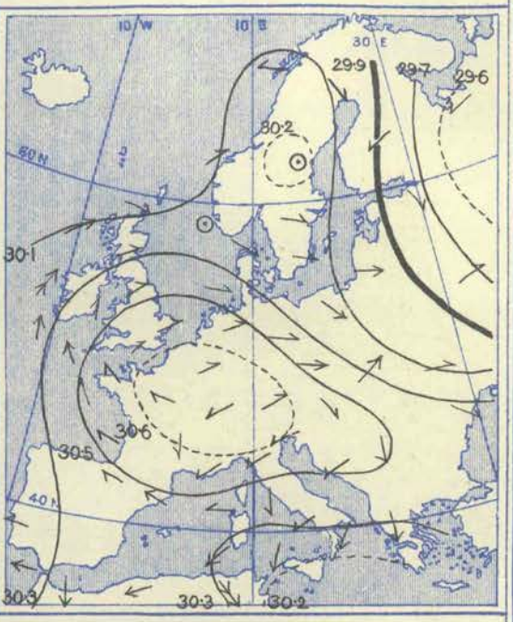
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in most districts, but cloudy or dull in the west and north of our Islands, and in many of the more northern districts of the Continent. Rain falling at Christiansund, Sumburgh Head, on the west coast of Ireland, and at Athens, and snow at St. Petersburg and Munich. Slight rain experienced later in Algeria and Tunis, and at Malta, and as much as 0·7 in. at Christiansund. Slight snow in various parts of Russia.

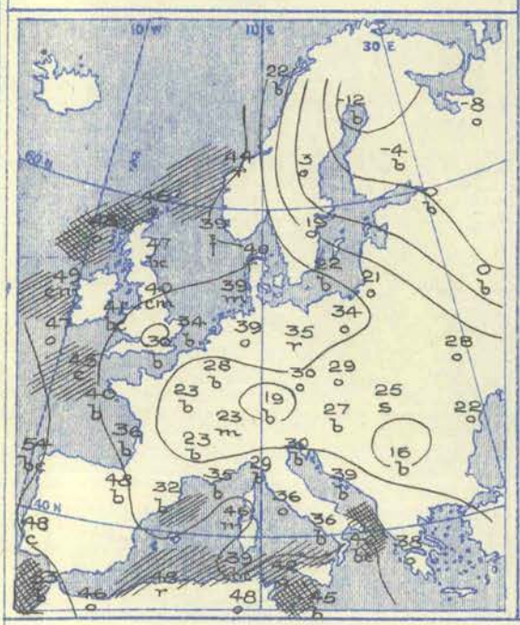
Temperature risen in most northern, and fallen in most southern and central regions. 8 a.m. readings highest, 56° at Algiers, 55° at La Calle, 53° at Blacksod Point. Lowest, −6° at Archangel, −1° at Moscow, +15° at Breslau, 18° at Odessa, 27° at Paris, 33° in London and at Madrid, 35° at Leghorn, and 36° at Nice, Naples and Constantinople. Subsequently rising to 50° or a little above in many parts of our Islands, and the west and south of France, to 63° at San Fernando and Oran, and to 66° at Lisbon. Not much exceeding 32° over Germany and the east of France, and remaining much below it over Russia and Hungary. Maximum as low as 38° at Naples.

Wind in morning light and anticyclonic in all the more central countries, but cyclonic both in the far north and over the Mediterranean, and also on our extreme west and north-west coasts. Strong from South in regions last named, strong from North-East over Italy and its neighbourhood, and strong to a gale from West or North-West over Norway, Sweden, and the Gulf of Finland. Wind continuing very strong over the Mediterranean, Italy, and Greece, and increasing to a strong gale from North-West at Tunis. No other important change, except over Scandinavia, where Westerly and North-Westerly current dying out.

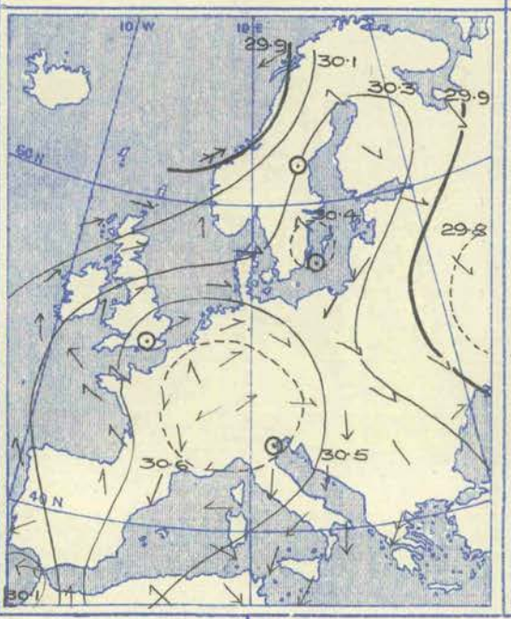
Barometer risen briskly in most countries, but fallen in Norway, Sweden, and Finland. Readings at 8 a.m. ranging from 30·7 ins. at Frankfürt and Brussels, in the centre of a very extensive anticyclone extending from the south of Ireland to the Black Sea, to 30·0 ins. at Athens, and to less than 29·4 ins. in a disturbance over Finland. Latter system moving away eastwards later, and barometer rising quickly in its rear. Pressure decreasing slowly over the United Kingdom, rising over southern Europe and Algeria.

Wednesday, 18th February, 1903.

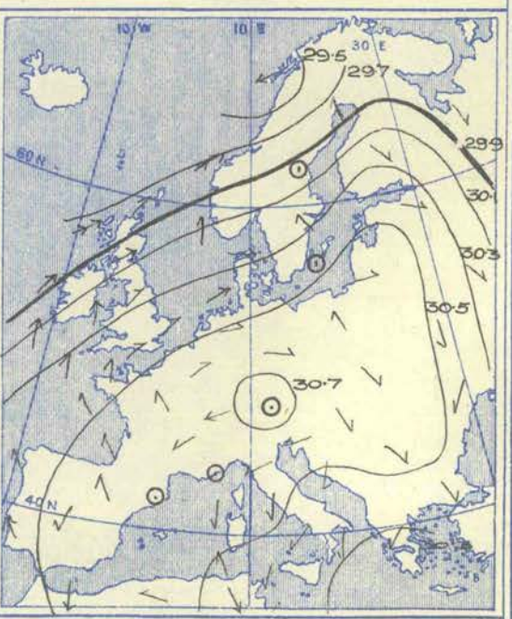
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright as a whole, but a considerable amount of cloud in Ireland and Scotland, and also over southern Russia. Rainy at Christiansund, Skagen, Berlin, and Algiers, and snow falling at Breslau and Lemberg. Slight rain later at some of our own extreme northern and north-western stations and over Germany, and some snow in Sweden and Finland. Very fine and bright over the greater part of England.

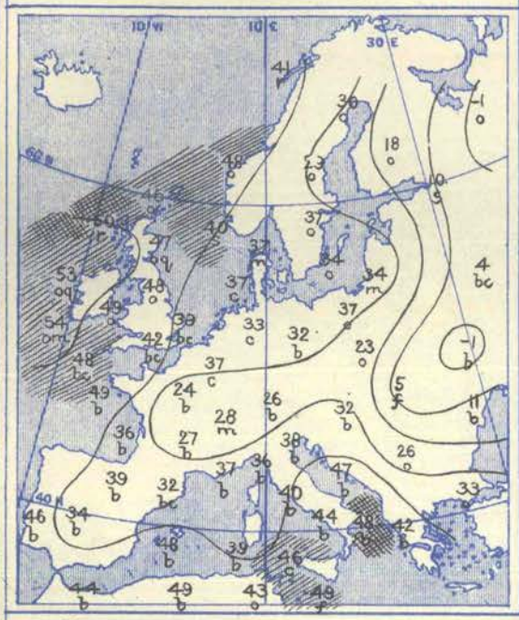
Temperature fallen quickly over Sweden and Finland, risen over central Europe. Readings at 8 a.m. highest, 54° at Corunna, 53° at San Fernando, 49° at Blacksod Point and Nairn. Lowest, −12° at Haparanda, 0° (zero) at St. Petersburg and Moscow, 16° at Hermanstadt, 19° at Munich, 23° at Paris, 28° at Oxford and Pesaro, 29° at Florence, 36° at Rome and Naples, 38° at Athens, and 39° at Cagliari. Maxima during day exceeding 50° in many parts of our Islands, France, Spain, and Italy, and touching 61° at Lisbon, 63° at Biarritz, and 64° at Nemours. Maxima at Athens and Aumale only 41° and 45° respectively.

Wind light and anticyclonic over all the central countries, the Baltic, and Finland. Fresh to strong from South or South-West on our own western coasts and in the west of Norway (a gale at Christiansund). Strong from some northerly point over the central portion of the Mediterranean, and strong to a gale both at Athens and San Fernando—from North-North-East and East respectively. No great change later as a whole, but gales at Athens and Christiansund subsiding, and force of wind decreasing at most Mediterranean stations.

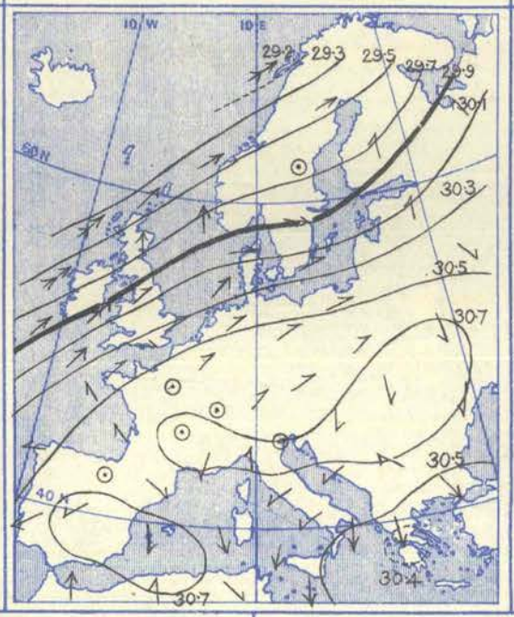
Barometer risen generally, but fallen slowly over our Islands and the west of Norway. Readings at 8 a.m. ranging from 30·70 ins. at Frankfürt and Lyons, and from 30·3 ins. and upwards in a very large anticyclonic area embracing the southern half of Europe and stretching northwards to Finland, to less than 30·3 ins. to the southward of Italy and Greece, to 30·02 ins. at San Fernando, 29·9 ins. and less off the west of Norway, and to below 29·8 ins. over central Russia. Barometer falling very briskly over northern Europe later, and rather decidedly on our northern and western coasts. Pressure increasing over the Mediterranean and the bordering countries.

Thursday, 19th February, 1903.

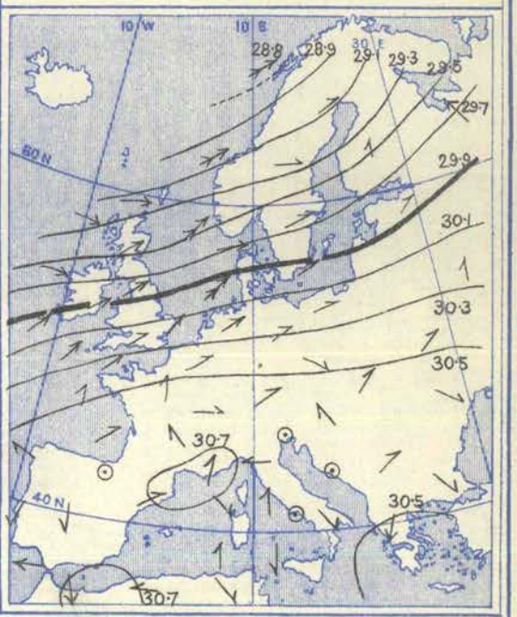
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather at 8 a.m. cloudy or dull over the north and west of our Islands, and the more northern parts of the Continent, with rain in the Hebrides and at Bodö, and snow at St. Petersburg. Fine generally elsewhere, but foggy at Malta, and rainy at Athens. Rain falling later at most of our own western and northern stations, and rain or snow in many parts of Scandinavia and Russia—heaviest falls 0·55 in. at Christiansund, and 0·87 in. at Stornoway.

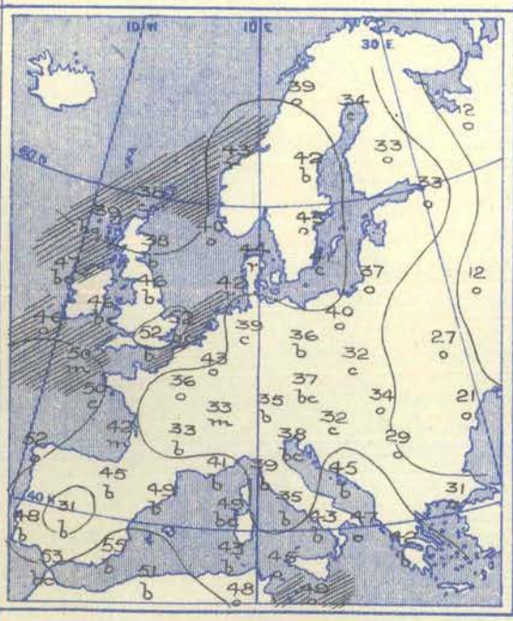
Temperature fallen over the Iberian Peninsula and Algeria, risen elsewhere—as much as 20° at Bath, and 42° at Haparanda and Uleaborg. Ranging at 8 a.m. from between 54° and 50° at the Irish stations, and 49° at Algiers and Malta, to below 30° over most parts of northern and central Europe, to 24° at Paris, 10° at St. Petersburg, 8° at Odessa, 4° at Moscow, -1° at Archangel, and to -2° at Kharkov. As low as 34° at Madrid, 33° at Constantinople, 32° at Perpignan, and 30° at Florence. Rising later to 59° at Oxford, and 57° at several of our other stations, to 68° at Corunna and Bilbao, and to 67° at Limoges. Only reaching 41° at Athens, and not exceeding 33° at Constantinople.

Wind in morning chiefly South-Westerly over our Islands and the northern half of Europe, and strong to a gale on our western coasts in Scandinavia and Finland. More variable in the southern countries, but generally from some northerly point. Moderate Northerly gales blowing at Athens and Malta. Wind veering towards west on our northern coasts later, but continuing strong. Moderate or fresh gales setting in at San Fernando and over Denmark. No very important change elsewhere.

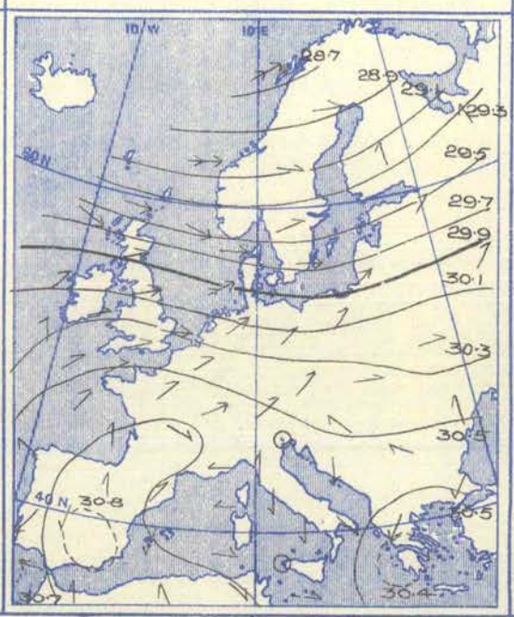
Barometer fallen in the most north-western countries, risen elsewhere. Readings at 8 a.m. ranging from 30·6 ins. to 30·7 ins. and upwards in a large irregularly-shaped area extending from Spain across central Europe to the south-west of Russia, to less than 29·2 ins. in a very large cyclonic disturbance having its centre off the north-west of Norway. Pressure continuing to decrease all day over northern Europe, but very little modification taking place within the anticyclonic area.

Friday, 20th February, 1903.

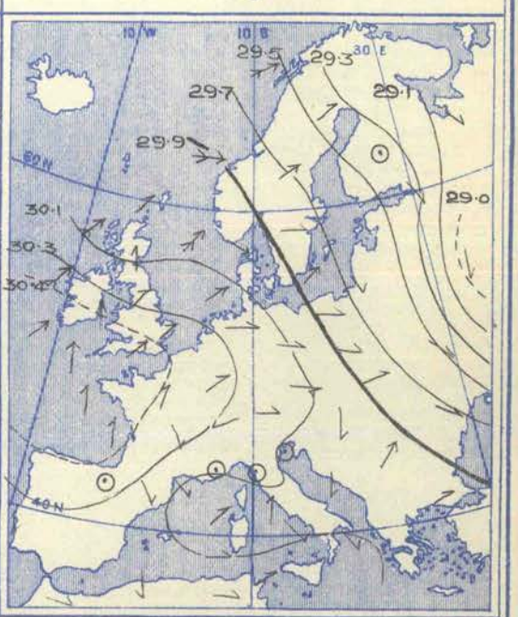
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather at 8 a.m. fair or fine generally, but cloudy or overcast in most northern regions. Squalls of hail reported in the Hebrides, and rain in Denmark, Finland, and the west of Norway. Rain falling later over all our own more western and northern districts, and at a few of our south-eastern stations, but amounts not large except at Stornoway. Remaining fine and dry over the southern countries.

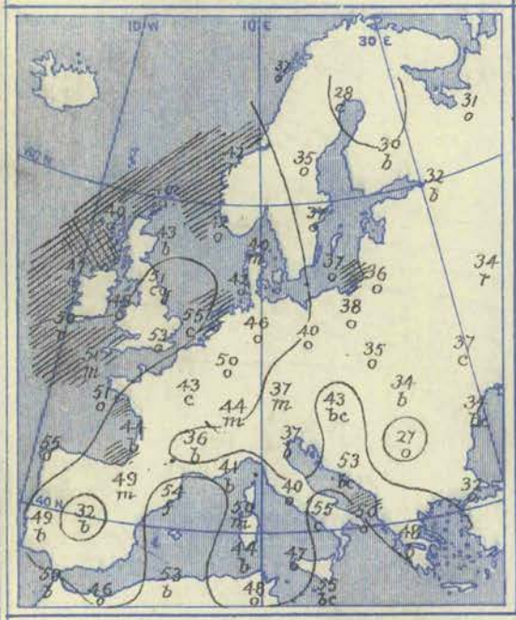
Temperature risen as a whole, but fallen in Ireland and Scotland. Ranging at 8 a.m. from 53° at San Fernando, and 52° in London and at Yarmouth, to less than 40° over central Europe and the north of Italy, 31° at Madrid and Constantinople, 27° at Limoges, and to 12° at Kharkov, Moscow, and Archangel. Rising during day to 58° at Oxford, 60° in London, and at a few southern French stations, to 66° at Oran, 68° at Madrid, and to 72° at Oporto and Corunna. Not exceeding 36° at Constantinople, 45° at Athens, and 52° at Pesaro.

Wind light and irregularly anticyclonic over all the southern countries and fresh or strong from West or South-West in the more northern regions; gales prevailing at some Norwegian and Danish stations. Very little change over the southern countries later, but wind increasing to a gale from West in north Germany, and from South and South-West on our own western and northern coasts.

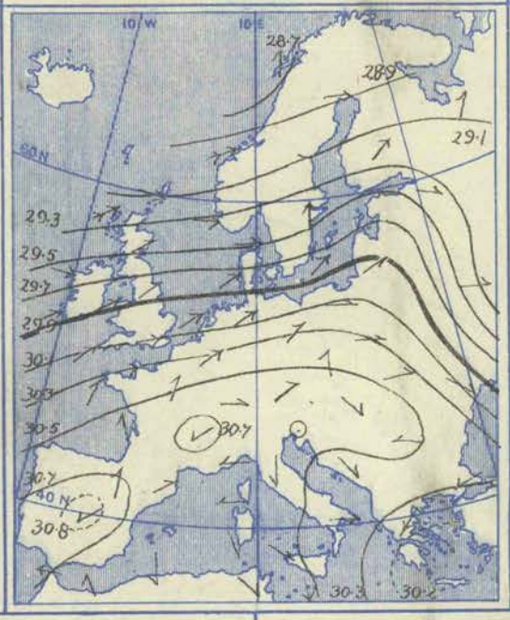
Barometer at 8 a.m. highest, 30·8 ins. and above, over central and eastern Spain, and above 30·5 ins. in a large area embracing most of the southern countries. Lowest, 28·7 ins. and less in the centre of a depression over Lapland; below 30·4 ins. in another system over Greece Latter system becoming deeper during day, and a fresh disturbance causing a very brisk baric fall in Ireland and the west of Scotland. Pressure decreasing somewhat over Spain, and becoming highest over central and southern France and Bavaria.

Saturday, 21st February, 1903.

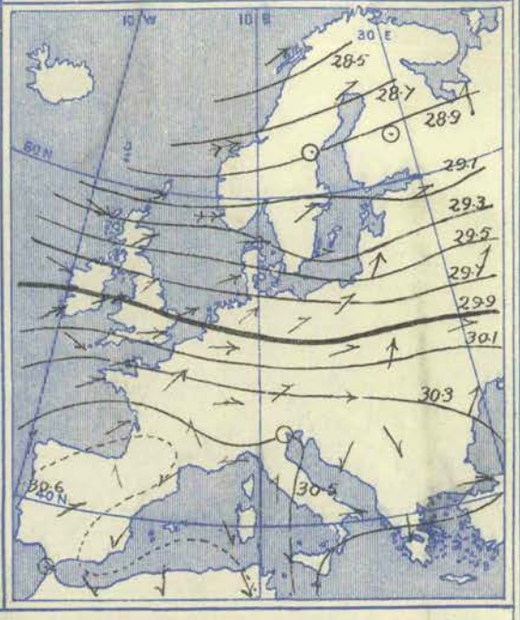
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. varying a good deal, but mostly cloudy or dull excepting on the shores of the Mediterranean, the southern parts of Austria, and on the northern shores of the Black Sea. Rainy at several of our own western stations, at Christiansund, Karlstad, and St. Petersburg. Rain becoming general over our Islands later (heavy at some western stations), and rain or snow falling in most northern regions.

Temperature risen is most countries, fallen in Sweden and Finland. Ranging at 8 a.m. from 55° at Malta, Naples, Corunna, and Yarmouth, and from between 54° and 59° in most English districts, to 35° at Wick and Hernösand, 34° at Odessa and Moscow, 32° at St. Petersburg, Constantinople, and Madrid, and to 28° at Haparanda. As low as 40° at Rome, and 45° at Sfax. Rising during day to 57° at Yarmouth and in London, to 59° at Munich and Nice, to 68° at Biarritz, Madrid, San Fernando, and Algiers, and to 70° at Corunna and Perpignan.

Wind in morning light or moderate and mainly anticyclonic over the Mediterranean and the southern countries generally; fresh or strong from the South-Westward over all the more northern regions, with a fresh gale on our extreme north-west coasts and at Christiansund, and a moderate gale in the Skager Rack. Wind veering somewhat over our Islands and the northern countries during day; gale extending to our south-east coasts and becoming general and more violent along the west coast of Norway. Wind increasing to a moderate gale from North-East at Athens.

Barometer at 8 a.m. ranging from 30·5 ins. to 30·6 ins. in an irregularly formed anticyclone embracing central Europe with the western half of the Mediterranean and the bordering countries, to 30·19 ins. at Athens, 29·27 ins. at Moscow, and to 28·64 ins. at Bodö. A fresh fall in progress in the south-west of Ireland. Barometer falling still lower over Great Britain and the more northern regions of the Continent later, but rising again in Ireland. Southern anticyclone decreasing somewhat in energy.

IV.—GENERAL NOTES, etc.

At the commencement of the week pressure was highest over the Bay of Biscay, the west of France and Spain, and lowest over eastern and north-eastern Europe. This distribution soon became modified, and on Monday the barometer was highest in a narrow ridge extending from the south of Spain to the Shetlands. Pressure soon began to decrease on our north-west coasts, and to increase quickly over central and northern Europe, until by Wednesday a very large and irregularly shaped anticyclone stretched from Algeria to Finland, and from our own western coasts to the Black Sea. From this date, however, the barometer fell very decidedly over our Islands and northern Europe generally, and the highest pressures became confined to the southern and central regions. The baric fall was caused by very large and deep depressions, whose centres passed over or to the northward of Lapland, and the extreme north of Russia, and to their secondaries further to the southward. These caused the wind, which had hitherto been somewhat variable in direction and of no great force, to back to between South and West over the northern half of our area generally, and to increase in strength, until it blew with the force of a gale at times over the United Kingdom, Denmark, Scandinavia, the Baltic, and Finland. Over the central and southern regions the wind was mainly light and irregularly anticyclonic, but in Greece it occasionally blew strongly or with the force of a gale from some Northerly point. Rain was almost entirely absent from the countries under the immediate influence of the anticyclone, but in the most northern and north-western countries precipitation was of rather frequent occurrence—of rain over our north-western districts, and of rain or snow on the Continent. Temperature underwent considerable fluctuations generally, especially in the far north—but was almost continuously above the normal on the Atlantic seaboard of our area.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the reading at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Belgium, and Holland; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; at 9.25 a.m. in Spain, and 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands; 4.36 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.25 p.m. in Spain; 6.51 p.m. in Algeria 6·59 p.m. in Russia; 7 p.m. in Germany, Denmark, Norway, and Sweden; 8 p.m. in Austria and Italy, and 9 p.m. in Holland and Belgium. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 38.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	11·2	− 4·1	17	− 6
STRATHPEFFER SPA	7·1	− 9·3	11	− 14
EDINBURGH	6·9	− 8·3	10	− 12
COCKLE PARK	11·5	—	17	—
NEWCASTLE-ON-TYNE	7·3	—	11	—
YORK	3·7	− 12·2	5	− 18
CROMER	26·1	—	38	—
LOWESTOFT	24·6	—	35	—
HOLLESLEY BAY	28·6	—	41	—
DUNMOW	24·4	—	35	—
SHEFFIELD	16·4	—	24	—
WORKSOP	10·8	− 5·0	16	− 7
THURCASTON	21·7	+ 5·3	31	+ 8
MARGATE	32·5	+ 13·4	46	+ 19
BROADSTAIRS	31·4	—	45	—
RAMSGATE	—	—	—	—
EASTBOURNE	22·8	+ 2·6	32	+ 4
BRIGHTON	18·4	− 2·3	26	− 3
WORTHING	21·9	—	31	—
BOGNOR				
WATERGATE PARK	18·2	—	26	—
WESTBOURNE	21·8†	+ 0·5	31†	+ 1
VENTNOR HOSPITAL	22·1	+ 0·3	31	0
BOURNEMOUTH	23·3	—	33	—
MARLBOROUGH	24·7	+ 8·7	35	+ 12
SOUTHPORT	9·5	—	14	—
RHYL	14·4	—	21	—
ABERDOVEY	24·3†	—	35†	—
TENBY	10·4	− 11·3	15	− 16
TORQUAY	22·7	+ 3·0	32	+ 4
NEWQUAY	16·9	− 4·4	24	− 6
GUERNSEY	28·8†	+ 4·9	41†	+ 7

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 8.] *Fourth Series.* WEEK ENDING SATURDAY, FEBRUARY 28TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 44.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	48	27	42·5	33·5	38·0	0 average	1	− 7	30	− 5	80	+ 25	235	− 53
	1. SCOTLAND, EAST	53	28	43·7	33·4	38·6	0 average	5	− 7	32	− 6	113	+ 45	256	− 74
	2. ENGLAND, N.E.	54	29	47·8	36·0	41·9	3 above	16	+ 3	25	− 7	144	+ 72	182	−100
	3. ENGLAND, EAST	57	30	50·6	38·4	44·5	5 above	33	+17	10	−25	179	+ 97	169	−145
	4. MIDLAND COUNTIES	54	29	48·3	36·5	42·4	3 above	26	+ 9	15	−20	171	+ 75	183	−134
	5. ENGLAND, SOUTH	55	33	49·4	40·7	45·1	4 above	27	+ 9	4	−23	178	+ 66	114	−127
Principal Grazing Districts.	6. SCOTLAND, WEST	51	26	45·8	35·8	40·8	1 above	11	− 1	24	− 4	122	+ 39	158	− 78
	7. ENGLAND, N.W.	55	29	47·7	37·2	42·2	2 above	24	+11	13	−14	167	+ 82	147	− 83
	8. ENGLAND, S.W.	56	32	49·9	39·2	44·6	2 above	30	+10	8	−13	207	+ 71	88	− 93
	9. IRELAND, NORTH	55	28	46·1	34·1	40·2	1 below	11	− 6	31	+ 8	147	+ 32	151	− 51
	10. IRELAND, SOUTH	57	29	49·1	36·2	42·6	1 below	29	+ 6	16	− 1	230	+ 59	87	− 65
	— CHANNEL ISLANDS	56	40	51·5	44·1	47·8	3 above	41	+15	0	− 9	284	+ 89	33	− 45

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 44.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	26	16 more	44	+ 6	16·1	+ 6·9	6	−11	8	−16	45	− 38	10	− 8
	1. SCOTLAND, EAST	6	16	10 more	34	+ 4	8·3	+ 3·5	19	− 1	26	− 1	67	− 41	14	− 9
	2. ENGLAND, N.E.	5	6	2 more	27	− 2	3·0	− 0·3	21	− 1	29	− 2	90	− 23	18	− 5
	3. ENGLAND, EAST	5	5	1 more	22	− 8	2·0	− 1·3	20	− 3	27	− 4	127	+ 5	25	+ 1
	4. MIDLAND COUNTIES	5	12	8 more	25	− 4	3·4	− 0·7	17	− 3	24	− 4	98	− 4	20	− 1
	5. ENGLAND, SOUTH	7	15	10 more	31	+ 2	3·7	− 0·7	17	− 4	24	− 5	110	− 4	22	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	29	19 more	41	+ 7	13·9	+ 5·0	13	− 5	18	− 7	53	− 42	11	− 9
	7. ENGLAND, N.W.	6	17	11 more	35	+ 3	6·8	+ 1·7	18	− 1	25	− 2	97	− 2	20	0
	8. ENGLAND, S.W.	7	18	11 more	36	+ 2	6·8	+ 0·1	18	− 5	25	− 7	99	− 31	19	− 6
	9. IRELAND, NORTH	7	19	13 more	41	+ 4	8·1	+ 2·6	17	− 1	24	− 2	75	− 33	15	− 7
	10. IRELAND, SOUTH	7	23	15 more	40	+ 4	8·7	+ 1·6	18	− 3	25	− 4	86	− 39	17	− 8
	— CHANNEL ISLANDS	7	17	11 more	37	+ 1	5·2	− 0·4	21	− 6	28	− 8	125	− 25	24	− 5

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period was extremely rough and unsettled throughout the Kingdom. The rain was very frequent and generally heavy except over the eastern and southern parts of England; in this latter locality there were no large amounts until late on Friday, when about an inch fell on the coast. At many northern stations, the fall consisted largely of hail, sleet, or snow. Thunder and lightning were experienced in the western and northern districts—mostly on Wednesday.

Temperature was again above the mean over England, but only just equalled it in Scotland N. and E., and was 1° below it in Ireland. In England S. and E., the excess was 4° and 5° respectively. The highest of the maxima were recorded on Sunday at most English stations, but over the Kingdom as a whole, both the maxima and minima were registered on very irregular dates. The former ranged from 57° in England E. and Ireland S., to 48° in Scotland N., and the latter from 26° in Scotland W., to 33° in England S., and to 40° in the Channel Islands.

Rainfall was only slightly more than the mean in England N.E. and E., but in all other parts of the Kingdom the excess was very large; in most cases the fall was about three times as great as the mean. The rainfall collected in the gauges at some of the south-western and southern stations during the earlier days of the week was of a yellowish sandy colour.

Bright Sunshine was deficient in all districts except England N.W. The percentage of the possible duration ranged from 29 in England N.E., to 18 in Scotland W., and to 8 in Scotland N.

Barometer and Wind. A series of large and deep cyclonic disturbances passed in a general North-Easterly direction over the western and northern parts of our area, while the highest pressure was found to the southward or south-eastward of our Islands. The centres of most of these systems were beyond our coasts, but during the night of Thursday, an unusually deep and important disturbance moved north-eastwards, and at 8 a.m. on Friday, lay over central Scotland, subsequently travelling to Scandinavia, where it became less deep. Before the advent of this depression, strong winds and gales from between South and West, had already been experienced almost daily, but those which accompanied this system were of unusual violence—especially in the west and north-west, where the wind rose to the force of a "storm" (Beaufort Scale). At Southport, one of the gusts registered by Dines' anemometer had a velocity as high as 92 miles per hour. At the end of the period a small disturbance which had been developed over the English Channel, was moving away quickly to the Netherlands while the barometer had begun to fall again in Ireland

97 | 90 Wy & S. Ltd
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 43 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	45	33	42·7	36·1	39·4	+ 1·4	2	21	7	1·35	+ 0·63	*	*	*	*
	Stornoway	48	32	44·9	33·3	39·1	- 0·1	8	32	7	2·28	+ 1·38	9·2	- 9·4	13	- 14
	Wick	45	30	42·0	33·4	37·7	- 0·7	0	30	6	1·00	+ 0·50	*	*	*	*
	Lairg Ⓢ	42	27	39·6	31·6	35·6	- 0·4	0	45	7	1·39	+ 0·69	*	*	*	*
	Glencarron Ⓢ	47	30	41·4	31·6	36·5	- 0·9	0	39	7	3·57	+ 1·93	*	*	*	Ⓢ *
	Fort Augustus Ⓢ	46	29	43·2	32·4	37·8	- 0·9	3	34	7	3·57	+ 2·69	1·9	- 10·9	3	- 15
	Fort William	48	31	43·8	35·9	39·9	+ 0·4	5	23	7	4·91	+ 3·19	0·4	- 15·9	1	- 23
1. SCOTLAND, E.	Nairn	46	31	42·7	33·4	38·1	- 0·5	2	31	6	1·08	+ 0·70	*	*	*	*
	Aberdeen	46	32	44·9	35·1	40·0	+ 1·2	8	26	4	0·82	+ 0·28	22·7	+ 1·0	32	+ 1
	Braemar Ⓢ	42	28	39·5	30·8	35·2	0·0	0	48	7	3·37	+ 2·71	*	*	*	*
	Ochtertyre Ⓢ	47	28	43·4	32·3	37·9	- 0·7	4	35	7	2·34	+ 1·56	*	*	*	*
	Leith	53	31	47·4	35·1	41·3	+ 1·0	15	28	7	0·76	+ 0·40	*	*	*	*
	Marchmont Ⓢ	51	30	44·4	33·9	39·2	+ 1·3	7	30	7	0·90	+ 0·33	18·8	- 0·8	26	- 1
2. ENGLAND, N.E.	Alnwick Castle	51	31	46·5	35·1	40·8	+ 1·9	13	27	6	1·02	+ 0·48	*	*	*	*
	Durham	51	29	46·3	33·5	39·9	+ 1·2	12	33	5	0·73	+ 0·35	23·7	+ 4·0	33	+ 6
	Shields	52	33	47·6	37·0	42·3	+ 2·6	23	14	5	0·51	+ 0·13	*	*	*	*
	Scarborough Ⓜ	53	32	48·9	35·1	42·0	+ 2·1	19	19	5	0·75	+ 0·31	19·2	—	27	—
	Spurn Head	52	35	48·7	38·1	43·4	+ 3·8	26	11	4	0·25	- 0·07	*	*	*	*
	Fulbeck (Lincolnshire)	54	31	48·6	36·9	42·8	+ 3·8	27	14	5	0·45	+ 0·09	25·8	—	35	—
3. ENGLAND, E.	Hillington Ⓜ	57	31	50·9	35·8	43·4	+ 3·8	36	17	5	0·54	+ 0·11	14·7	- 6·4	20	- 9
	Yarmouth	56	32	50·0	37·9	44·0	+ 5·0	31	11	2	0·06	- 0·35	*	*	*	*
	Geldeston	57	32	51·7	38·3	45·0	+ 5·0	37	10	2	0·04	- 0·33	18·6	- 3·9	25	- 5
	Cambridge	56	30	52·3	37·2	44·8	+ 4·8	40	13	4	0·43	+ 0·09	23·8	+ 1·8	33	+ 2
	Felixstowe	54	34	49·7	40·7	45·2	+ 5·4	28	4	6	0·47	—	27·8†	—	38†	—
	Rothamsted	54	33	49·3	37·7	43·5	+ 4·1	29	12	7	0·90	+ 0·45	18·5	- 2·3	25	- 3
	Shoeburyness	54	35	50·4	41·1	45·8	+ 5·5	30	3	7	0·82	+ 0·52	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	52	31	46·5	34·9	40·7	+ 2·2	13	28	5	1·36	+ 0·78	17·7	—	25	—
	Bawtry (Hesley Hall)	53	29	48·4	37·1	42·8	+ 2·9	26	14	6	0·67	+ 0·30	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	54	32	48·9	37·1	43·0	+ 3·4	28	14	4	0·53	+ 0·13	*	*	*	*
	Cheadle Ⓜ	51	31	46·8	34·8	40·8	+ 2·2	13	29	5	0·76	+ 0·20	*	*	*	*
	Birmingham (Edgbaston)	52	33	48·2	36·7	42·5	+ 2·8	26	15	4	1·34	+ 0·96	16·3	—	22	—
	Churchstoke Ⓜ	53	31	48·0	35·2	41·6	+ 2·2	17	28	6	2·23	+ 1·68	17·6	- 2·9	24	- 4
	Hereford Ⓜ	54	34	48·4	37·2	42·8	+ 2·3	26	13	7	2·03	+ 1·56	*	*	*	*
	Cirencester	54	31	49·3	36·5	42·9	+ 3·7	29	15	6	1·29	+ 0·75	16·7	- 4·8	23	- 7
	Oxford	54	35	49·9	39·0	44·5	+ 4·0	30	8	6	0·77	+ 0·36	15·5	- 4·9	21	- 7
5. ENGLAND, S.	London	55	34	50·7	40·4	45·6	+ 4·6	32	4	7	0·97	+ 0·59	12·8‡	- 0·5‡	17‡	- 1‡
	Swarraton (Alresford) Ⓜ	51	33	48·7	38·9	43·8	+ 4·4	26	9	7	1·66	+ 1·07	*	*	*	*
	Dungeness	52	38	50·0	42·9	46·5	+ 5·9	32	0	6	1·61	+ 1·30	18·2	—	25	—
	Hastings (St. Leonards)	51	36	49·0	40·7	44·9	+ 4·0	26	4	7	1·52	+ 1·03	16·5	- 8·2	22	- 11
	Southampton	53	36	51·6	41·0	46·3	+ 4·3	34	3	7	1·76	+ 1·21	20·8	- 1·9	28	- 3
	Portland Bill	51	38	49·1	42·7	45·9	+ 2·8	27	0	7	1·58	—	*	*	*	*
	Shaftesbury Ⓜ	50	33	46·7	38·0	42·4	+ 2·7	20	11	7	1·08	+ 0·51	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	51	30	44·7	35·3	40·0	- 0·4	8	25	7	5·20	+ 3·66	*	*	*	*
	Glasgow	51	33	45·0	36·0	40·5	+ 1·2	8	23	7	1·66	+ 0·97	5·8	- 8·2	8	- 12
	Cally Ⓢ	49	26	46·2	34·7	40·5	+ 0·9	12	29	7	2·75	+ 1·82	*	*	*	*
	Douglas (Isle of Man)	50	29	47·2	37·1	42·2	+ 1·2	22	14	7	1·84	+ 1·09	19·7	- 1·9	27	- 3
7. ENGLAND N.W.	Newton Reigny	55	29	46·4	34·6	40·5	+ 2·7	12	29	7	3·95	—	10·8	—	15	—
	Stonyhurst	50	33	46·0	36·4	41·2	+ 1·6	11	22	5	1·11	+ 0·29	13·3	- 5·1	18	- 7
	Blackpool Ⓜ	52	31	48·5	37·9	43·2	+ 3·2	26	11	6	1·02	+ 0·49	22·9	+ 4·3	32	+ 6
	Manchester (Prestwich)	52	32	47·3	36·7	42·0	+ 2·5	15	15	6	1·51	+ 0·97	18·1	—	25	—
	Liverpool Obsy. (Bidston)	54	34	48·7	38·1	43·4	+ 2·8	26	11	5	1·02	+ 0·61	16·4	—	23	—
	Chester (Hawarden Bridge)	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Llandudno Ⓜ	54	35	50·0	38·9	44·5	+ 2·1	31	9	5	1·54	+ 1·04	23·2	+ 2·7	32	+ 4
	Holyhead	50	34	46·9	38·0	42·5	+ 0·5	20	11	6	1·61	+ 1·05	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	6	2·52	+ 1·62	*	*	*	*
	Pembroke	50	38	48·7	40·9	44·8	+ 2·3	24	3	6	1·56	+ 0·95	16·4	- 6·9	22	- 9
	Clifton	55	36	50·6	39·0	44·8	+ 3·1	32	8	7	1·63	+ 1·05	*	*	*	*
	Bath	56	35	50·7	38·6	44·7	+ 3·2	33	10	7	1·48	+ 0·94	18·2	—	25	—
	Arlington (N. Devon)	53	32	48·6	36·0	42·3	+ 1·5	27	17	7	1·82	+ 0·87	*	*	*	*
	Cullompton Ⓜ	55	33	50·4	39·2	44·8	+ 2·8	31	8	7	1·61	+ 0·96	14·5	- 6·7	20	- 9
	Falmouth	53	37	50·1	41·5	45·8	+ 1·7	29	1	7	1·91	+ 1·04	21·8	- 2·8	30	- 4
	Plymouth	52	35	50·3	39·4	44·9	+ 1·7	31	7	7	1·62	+ 0·95	22·0	- 1·5	30	- 2
9 IRELAND, N.	Malin Head	50	34	44·1	35·7	39·9	- 1·0	6	24	7	1·32	+ 0·82	*	*	*	*
	Edenfel (Omagh)	52	28	45·3	33·0	39·2	- 0·3	9	34	7	1·79	+ 1·19	*	*	*	*
	Blacksod Point	52	33	47·3	36·9	42·1	- 1·1	22	14	7	2·42	+ 1·59	*	*	*	*
	Markree Castle	54	28	46·1	32·8	39·5	- 1·8	11	35	7	2·82	+ 2·13	17·2	- 1·6	24	- 2
	Armagh	54	29	46·4	33·1	39·8	- 0·9	12	35	7	1·65	+ 1·14	17·6	- 1·0	24	- 1
	Donaghadee	55	28	47·4	33·3	40·4	- 1·1	15	35	7	1·60	+ 1·07	*	*	*	*
10. IRELAND,	Dublin	57	32	49·9	36·7	43·3	+ 0·6	31	15	6	1·50	+ 1·01	24·4	+ 3·0	34	+ 4
	Birr Castle	56	29	47·9	33·6	40·8	- 0·7	17	34	7	1·94	+ 1·44	13·1	- 6·7	18	- 9
	Kilkenny	56	29	48·4	34·6	41·5	- 0·8	18	30	7	1·90	+ 1·35	*	*	*	*
	Waterford	52	31	47·7	35·9	41·8	- 0·6	16	25	7	2·23	+ 1·47	*	*	*	*
	Roche's Point	52	34	49·7	37·7	43·7	- 0·5	30	12	7	1·85	+ 0·92	*	*	*	*
	Valencia	54	35	49·4	38·3	43·9	- 1·2	29	10	7	3·31	+ 2·21	16·4	- 5·9	22	- 8
	Killarney	56	34	51·4	37·0	44·2	+ 0·5	36	14	7	3·04	+ 1·96	*	*	*	*
	Foynes	53	34	48·2	35·6	41·9	- 1·4	17	27	6	2·61	+ 1·92	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	40	51·1	44·4	47·8	+ 2·0	41	0	7	1·58	+ 0·98	20·5	- 5·4	28	- 7
	Jersey	56	40	51·9	43·7	47·8	+ 4·1	41	0	7	1·80	+ 1·23	21·0	- 6·6	28	- 9

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster. For additional Reports of Sunshine, see last page.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

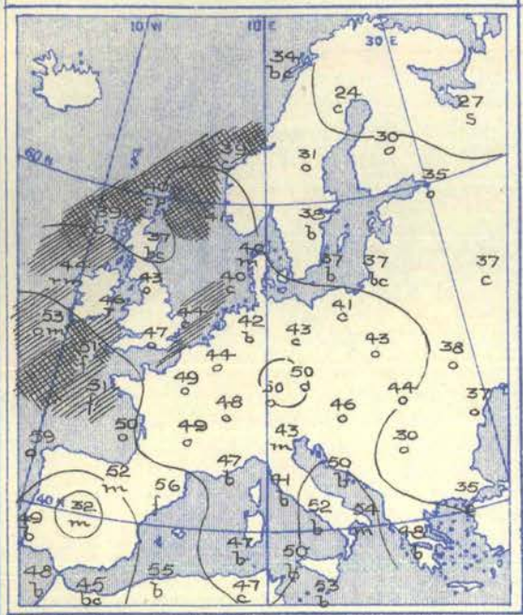
ERRATA:—

GLASGOW.—In the report ending the 14th February, the mean minimum temperature should read 41·0°, mean for week 45·8°, difference + 6·3, and accumulated below 3°.

LONDON.—In last week's report the mean minimum should read 36·7°, mean for week 44·7°, difference + 4·1°, and accumulated below 15°.

Sunday, 22nd February, 1903.

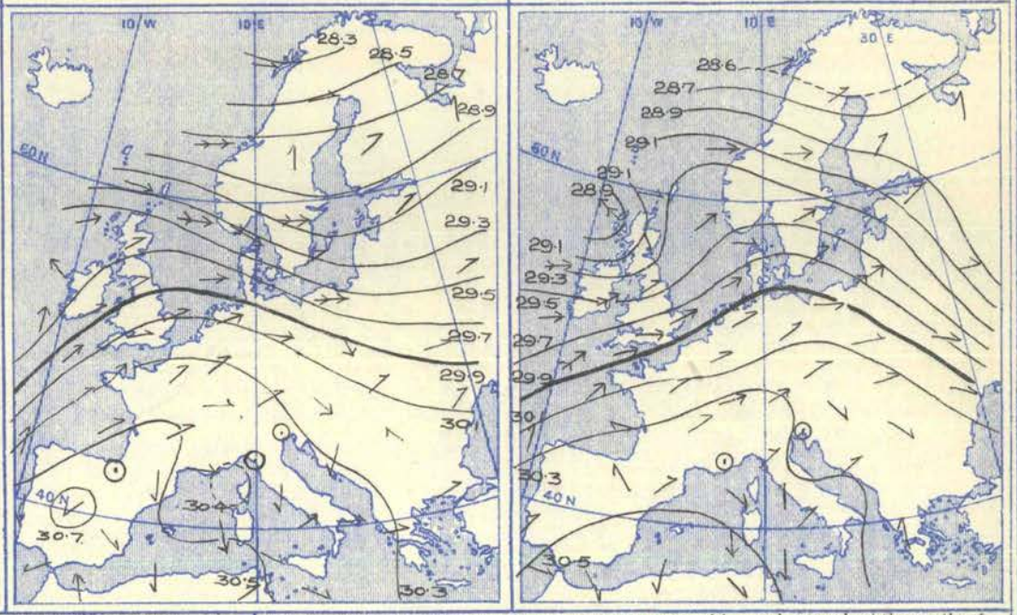
Temperature and Weather. 8 a.m.



Weather in morning cloudy or dull over western, northern, and central Europe generally, with fog in the western parts of the English Channel, rain in Ireland and Wales, and passing showers in Scotland. Fine over the Baltic and the south of Scandinavia, as well as in most parts of southern Europe. Rain falling later over the north-western and northern countries generally; lightning seen at night on many parts of our own western coasts.

Temperature fallen in our Islands, and also in Scandinavia, Denmark, and the Netherlands, risen in most other countries. Morning readings highest, 60° at Toulon, 59° at Bilbao, Corunna, and Alicante, and 56° at Barcelona; above 50° on our own extreme south-west coasts. Lowest, 24° at Haparanda, 27° at Archangel, and 30° at Uleaborg and Kuopio; below the freezing point over the extreme northern parts of Russia and Scandinavia generally. Rising during day to between 50° and 55° over nearly the whole of the United Kingdom, and to 56° at Yarmouth and Parsonstown; exceeding 65° in many parts of southern Europe, and reaching 73° at Barcelona and San Fernando, and 77° at Toulouse.

Barometer and Wind. 8 a.m. and 6 p.m.

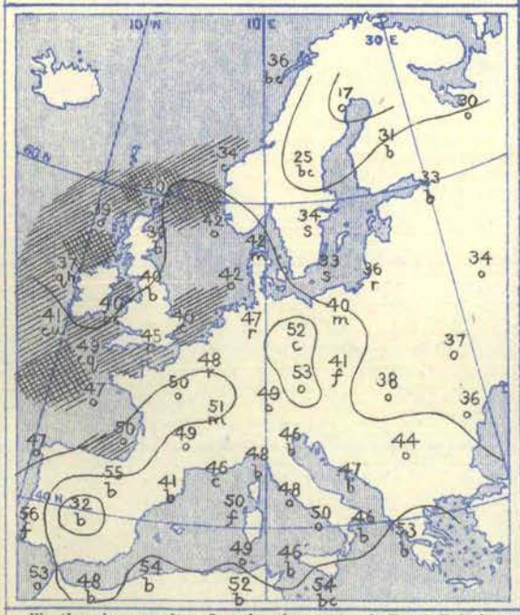


Wind strong from the Southward on our western coasts, with a moderate gale at the mouths of the English and Bristol Channels; moderate from the South-Westward in the eastern parts of the United Kingdom. Westerly over northern Europe generally, with a gale over Denmark, the Baltic, and the south of Scandinavia. Light from the Northward over the Spanish Peninsula; variable over Italy and the south of France. Subsequently increasing to a gale from the South-Westward over nearly the whole of England and Ireland, and from the South-Eastward in the Hebrides. Westerly gale over northern Europe subsiding.

Barometer highest, 30·7 ins. and upwards over central Spain; 30·4 ins. and upwards in an anticyclone covering nearly the whole of France and southern Europe. Lowest, 28·4 ins. and less in a cyclonic system over the extreme north of Norway; 29·6 ins. and less in another disturbance approaching the west of Ireland. Cyclonic areas both moving north-eastwards later; the centre of the latter appearing off the Hebrides in the evening; barometer at Stornoway falling below 28·9 ins., and gradients becoming steep over the United Kingdom generally.

Monday, 23rd February, 1903.

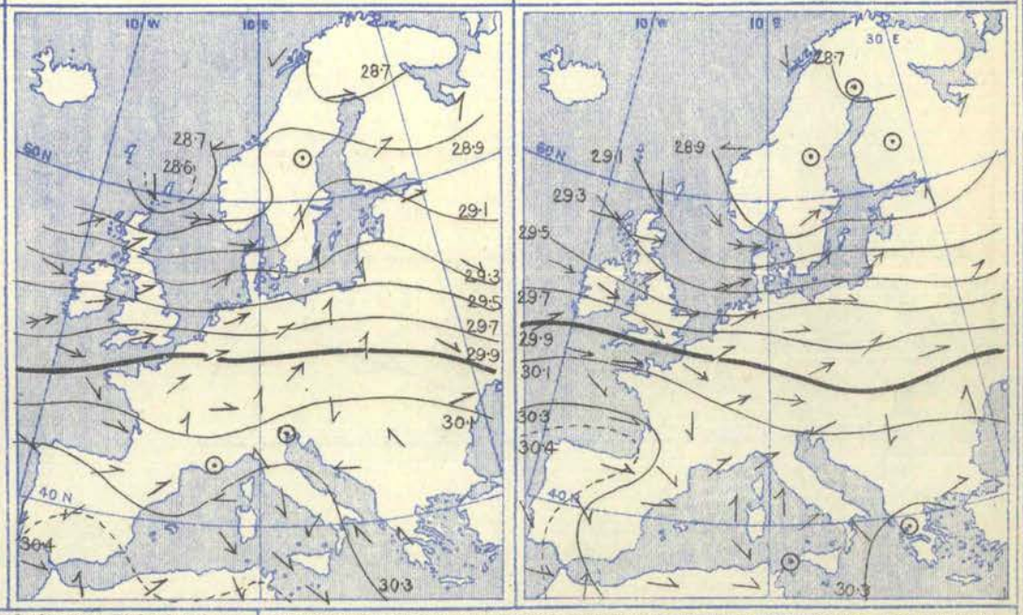
Temperature and Weather. 8 a.m.



Weather in morning fine in the east of Great Britain and also over Finland and the greater part of southern Europe. Cloudy or dull elsewhere, with showers on our own western coasts (of hail or sleet in places), rain in Belgium and north Germany, and snow in the south of Sweden. Rain, hail, or sleet, falling later over western and northern Europe generally; thunder reported at Rochefort in afternoon.

Temperature risen over Denmark, Germany, France, and the Netherlands, fallen in most other countries—quickly in Ireland. Morning readings highest, 58° at Vienna, 56° at Lisbon, and 55° at Biarritz and Barcelona; above 50° in many parts of France, Germany, and Austria, and very little below that point at some of the English Channel stations. Lowest, 17° at Haparanda, 22° at Uleaborg, and 25° at Hernösand; below the freezing point over the northern parts of Sweden and Russia generally, and only slightly above it over central Ireland. Rising during day to between 45° and 50° over England and Ireland, but very little above 40° in Scotland; exceeding 60° in many parts of central and southern Europe, and reaching 72° at Cagliari. Frost occurring over Great Britain at night.

Barometer and Wind. 8 a.m. and 6 p.m.

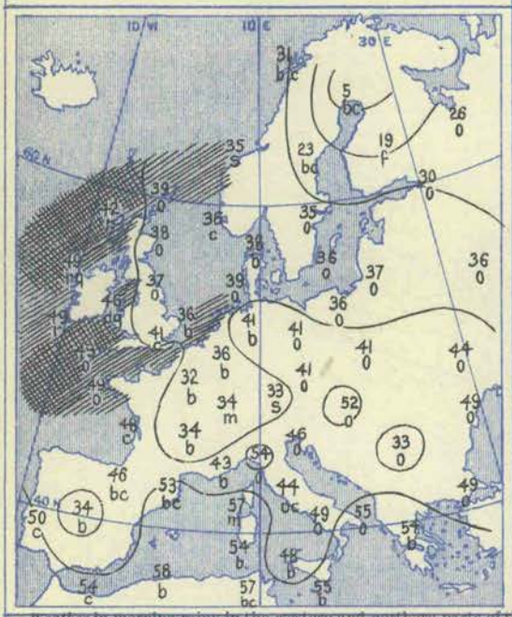


Wind Westerly or South-Westerly over western and central Europe generally, and strong in force in many places, with a gale on our own western coasts, as well as in the south of Norway; light from the Southward over the Baltic and the south of Sweden, and moderate from the Eastward or North-Eastward in the west of Norway; light and variable over the southern countries generally. Heavy Westerly to North-Westerly gales experienced later over Denmark and the south of Norway; wind veering to the North-Westward, also on several parts of our own northern coasts, but backing again in the west of Ireland.

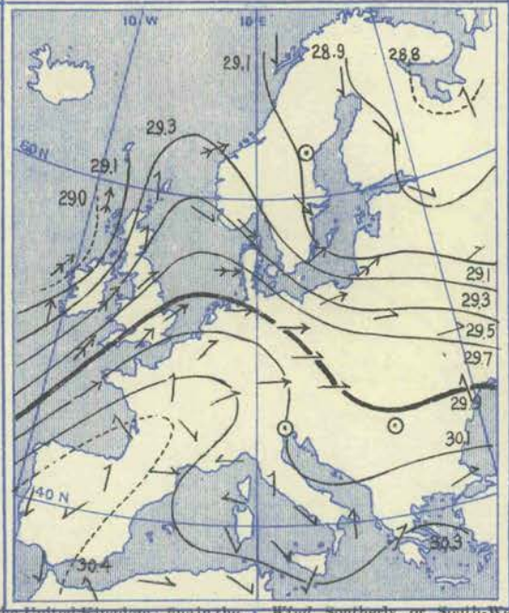
Barometer highest, 30·4 ins. and upwards over the central and southern parts of Spain, Algeria, and Tunis. Lowest, 28·6 ins. and less in a rather deep cyclonic system with its centre a little to the north-eastward of the Shetlands; 28·7 ins. and less in another disturbance over the extreme north of Scandinavia. Low-pressure systems both moving eastwards later—the former across the south of Scandinavia, and the latter over the Kola Peninsula. New disturbance approaching over our western coasts at night.

Tuesday, 24th February, 1903.

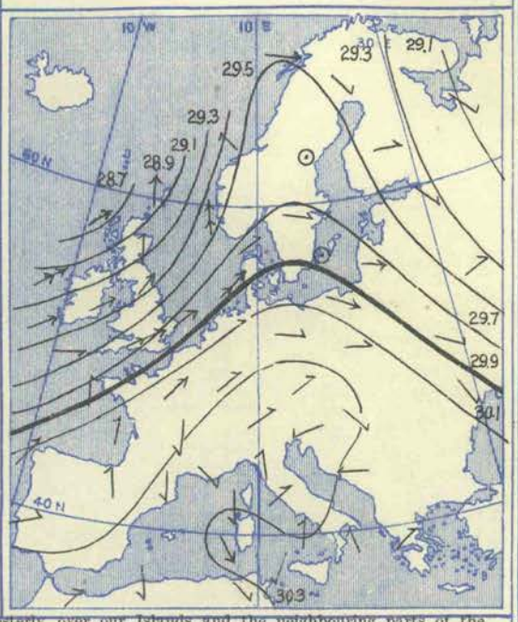
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning rainy in the western and northern parts of the United Kingdom; fine in the south and east of England, and also in the western and southern parts of the Continent. Fine in the north of Scandinavia, but dull in the northern and eastern countries generally, with rain at Hangö, and snow at Christiansund and Helsingfors. Rain falling later over nearly the whole of north-western Europe, and sleet or hail in Ireland and the west of Scotland. Lightning occurring at night in the western parts of the United Kingdom, and thunder also at Blacksod Point; aurora seen at Malin Head.

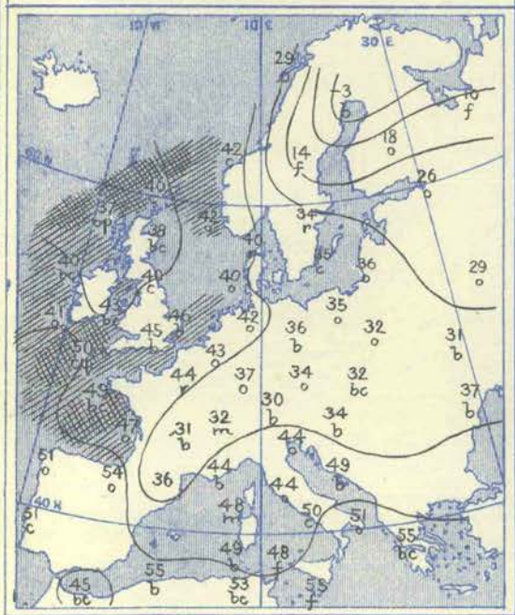
Temperature risen in the west and north of our Islands, but fallen in most other parts of Europe. Morning readings highest, 58° at Algiers, 57° at La Calle, and 55° at Malta and Brindisi; above 50° at the Mediterranean and Adriatic stations generally, and very little below it on our own extreme west and south-west coasts. Lowest, 5° at Haparanda, 19° at Kuopio, and 23° at Uleaborg and Hernösand; below the freezing point over the northern parts of Russia and Scandinavia. Rising during day to between 45° and 50° over the United Kingdom generally, and to 52° at Scilly; exceeding 60° in many parts of southern Europe, and reaching 69° at Palermo.

Wind Southerly or South-Westerly over our Islands and the neighbouring parts of the Continent, and strong to a gale in force on all our western coasts. Westerly or North-Westerly over the greater part of northern and central Europe, with a gale over Denmark and the Baltic. Light and variable over the southern countries generally, but Northerly over the Spanish Peninsula. Subsequently increasing to a gale from the South-Westward over the whole of the United Kingdom, and from the Southward in the south of Norway.

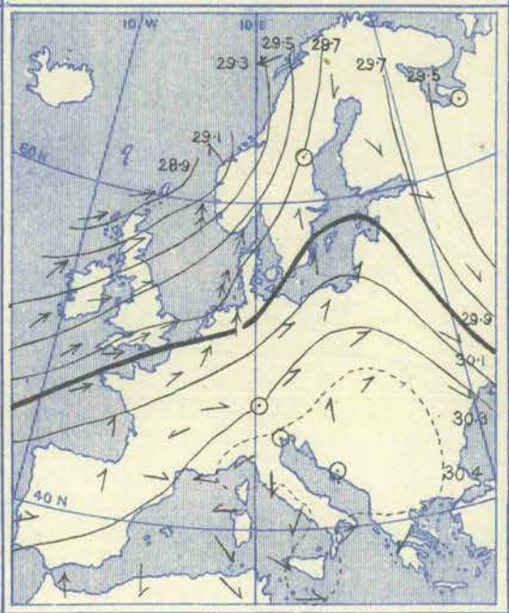
Barometer highest, 30·4 ins. and upwards over the Spanish Peninsula and the south-west of France; 30·1 ins. and upwards in an anticyclone covering the greater part of central and southern Europe. Lowest, 28·8 ins. and less in a shallow cyclonic area over the White Sea; 29·0 ins. and less in a much deeper disturbance lying off our own extreme north-west coasts. Low-pressure system over White Sea subsequently travelling eastwards; deep disturbance off our north-west coasts moving away in a north-north-easterly direction, to the northward of Scotland.

Wednesday, 25th February, 1903.

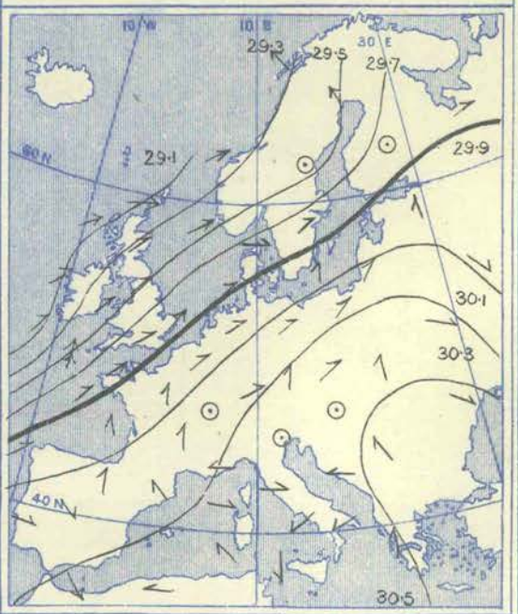
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair over the United Kingdom as a whole, but showery in places, with sleet at Nairn. Dull in the western and northern parts of the Continent, with rain in the south of Scandinavia, and also at Paris and Oporto. Fine and bright in several parts of southern Europe, but dull in Italy, and foggy at Malta and Palermo; fog also prevailing in the north of Sweden and at Archangel. Rain falling later over the west and north of France, and in all parts of the United Kingdom—in considerable amounts at our western and northern stations—and rain or snow over northern Europe.

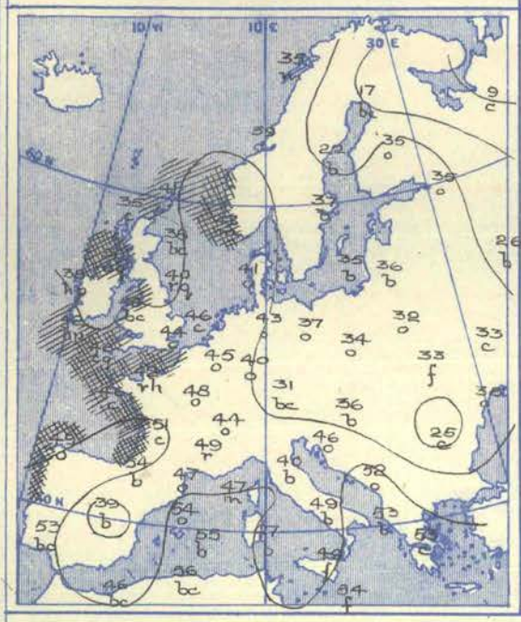
Temperature at 8 a.m. highest, 57° at Bilbao, 55° at Barcelona, Algiers Malta, and Athens, and 51° or 52° on the western coasts of the Spanish Peninsula. Lowest, −3° at Haparanda, +10° at Archangel, 29° at Bodö and Moscow, 30° at Munich, 31° at Lyons, and 36° at Perpignan. Exceeding 50° at our southern and south-western stations during day, touching or rising above 60° over most parts of southern Europe and Algeria. Highest readings of all 68° at Athens, and 66° at Brindisi.

Wind in morning fresh or strong from South-West over our Islands, the north of France, and the Netherlands (a fresh gale at Malin Head), but drawing into South and blowing a gale to the eastward of the North Sea, and into East-North-East at Bodö. Light and variable over the southern and south-eastern countries. Backing somewhat over our Islands by evening, and subsequently increasing to a fresh to whole gale on our western and southern coasts. Decreasing in force, and veering a little over Scandinavia and Denmark.

Barometer at 8 a.m. ranging from 30·4 ins. and upwards in an irregularly shaped anticyclone extending from Malta to Cracow, and from Nice to the western shores of the Black Sea, to 29·5 ins. and less over northern Russia, and to below 28·9 ins. in a depression off the north of Scotland. Barometer rising very generally. Rise continuing all day over Europe as a whole, but falling quickly on our own south-west and west coasts towards evening. Gradients increasing very decidedly over our Islands.

Thursday, 26th February, 1903.

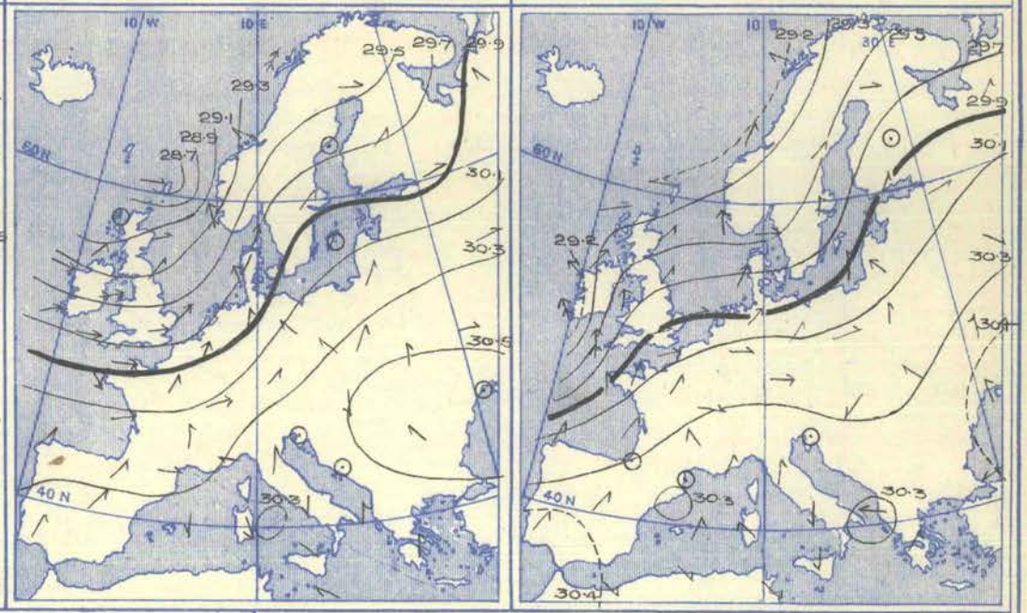
Temperature and Weather. 8 a.m.



Weather at 8 a.m. cloudy or dull except over the southern countries and Sweden. Sleet or hail showers falling at several of our own western and north-western stations, and fog prevailing at Palermo and Malta. Rain becoming very general over all the western countries of Europe later, but falls not heavy except over our own western and northern districts. Considerable falls of rain or snow occurring over Scandinavia—0·8 in. at Haparanda.

Temperature risen quickly over Finland, Sweden, and central France. Readings at 8 a.m. highest, 56° at Algiers and Bilbao, 55° at Palma, 54° at Malta, and 53° at Athens, Brindisi, Sanguinaires, and Lisbon. Lowest, 9° at Archangel, 17° at Haparanda, 22° at Hernösand, 25° at Hermanstadt, 26° at Moscow, 31° at Munich, 34° at Parsonstown, and 39° at Madrid. Rising to 50° or a little higher in some parts of Ireland and England later, and to above 60° in Spain, Algeria, Greece, and at some stations in the south of France and Italy. Highest values, 69° at Palermo, 72° at Tunis, and 79° at Aumale.

Barometer and Wind. 8 a.m. and 6 p.m.

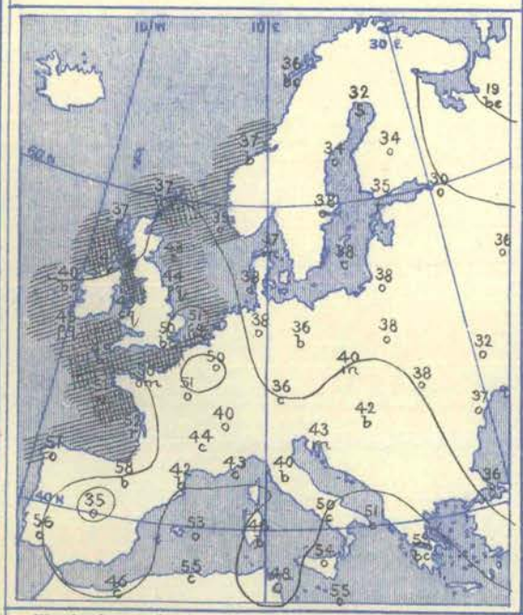


Wind in morning strong to a gale from between West and South-West over the United Kingdom and the north of France, and from the Southward on the southern and eastern shores of the North Sea, and also at Bodö. Light and variable over the Mediterranean and the more southern regions of Europe generally, and light from West or South-West over Sweden and Finland. Backing to South over our Islands by evening, and afterwards increasing to an extremely violent gale over all our western and north-western districts, and to a severe gale over the United Kingdom generally.

Barometer at 8 a.m. ranging from 30·5 ins. and upwards over the Black Sea, south Russia, and Transylvania, to below 28·7 ins. in a deep disturbance, which had moved very quickly from off the south-west of Ireland to the northward of the Shetlands. Gradients very steep between the Shetlands and Norway. Barometer falling with extreme rapidity over our western and northern coasts late in day, and the centre of an unusually deep cyclonic disturbance advancing over those regions from the Atlantic, and travelling North-Eastwards.

Friday, 27th February, 1903.

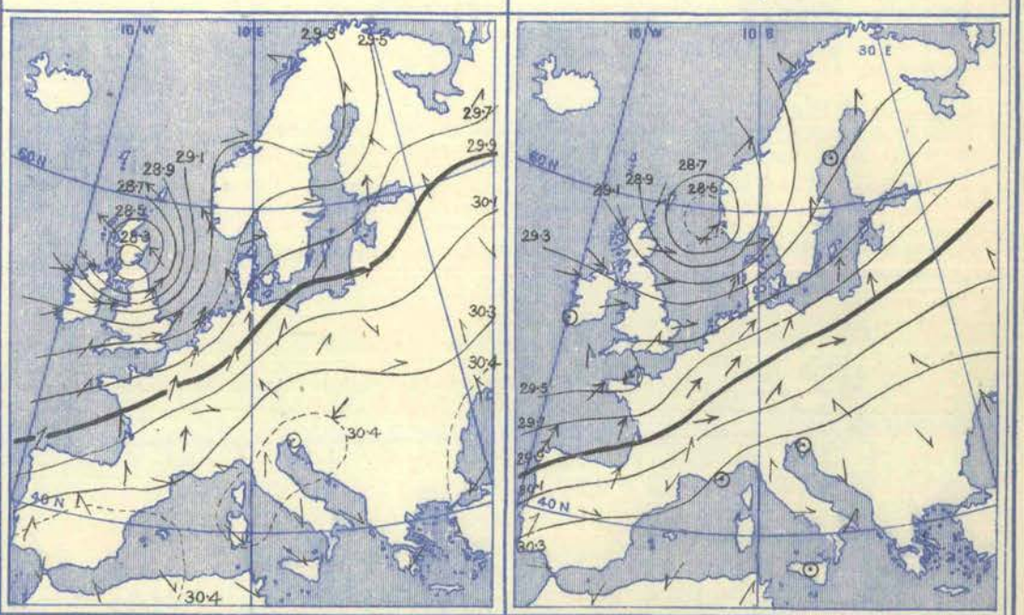
Temperature and Weather. 8 a.m.



Weather in morning fair or fine in all the more southern parts of the United Kingdom, and also in the west of Norway, Germany, Austria, and Italy. Cloudy or dull elsewhere, with rain over the northern parts of our Islands, and also in the west of France and in Finland; snow falling at Haparanda. Some improvement taking place later on our northern coasts, but heavy rains setting in over the extreme south of England and the north of France; amount measured next morning exceeding an inch in several places, the largest reported being 1·6 ins. at Cape Gris-Nez.

Temperature risen in most countries, but fallen in Norway and Denmark, and also in Spain and the south of France. Mornings readings highest, 62° at Bilbao, 58° at Biarritz, 57° at Corunna, and 56° at Lisbon, slightly above 50° in several parts of France, and the east and south-east of England. Lowest, 19° at Archangel, 30° at St. Petersburg, 31° at Nicolaïeff, and 32° at Haparanda and Kiev. Rising during day to 50° or slightly above it at most of the English stations; exceeding 60° in many parts of southern Europe; and reaching 69° at Bordeaux.

Barometer and Wind. 8 a.m. and 6 p.m.

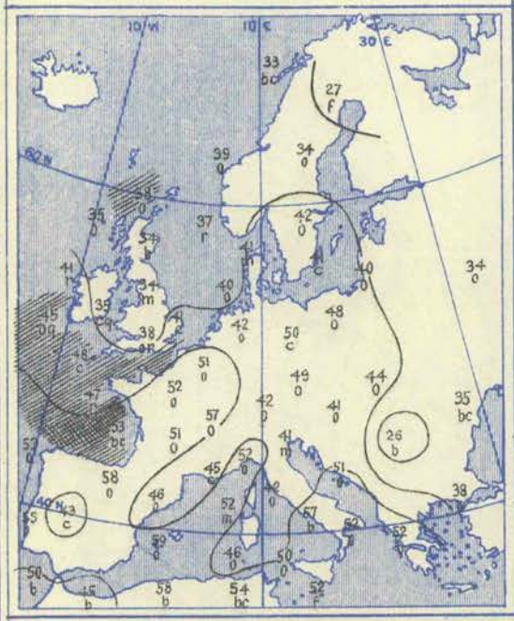


Wind strong to a gale from the Westward in Ireland, and from the South-Westward over England (gale very severe in the northern districts); Southerly gales reported on eastern shores of the North Sea, and strong Southerly or South-Easterly winds in the north of Scotland. Light to moderate from the Southward or South-Westward over Germany, the Baltic, and northern Russia; variable over southern Europe. Gales subsiding later over Ireland and England, but wind shifting to the Westward or North-Westward in Scotland, and blowing very strongly.

Barometer highest, 30·4 ins. and upwards to 30·2 ins. in an anticyclone covering the greater part of central and southern Europe. Lowest, 28·3 ins. and less over central Scotland, to which region the centre of a deep cyclonic system had advanced from the South-Westward; gradients very steep over the North Sea and the northern parts of Ireland and England. Centre of disturbance subsequently moving north-eastwards across the North Sea, and barometer rising rapidly on our own northern coasts; small secondary system in course of development over Brittany in evening.

Saturday, 28th February, 1903.

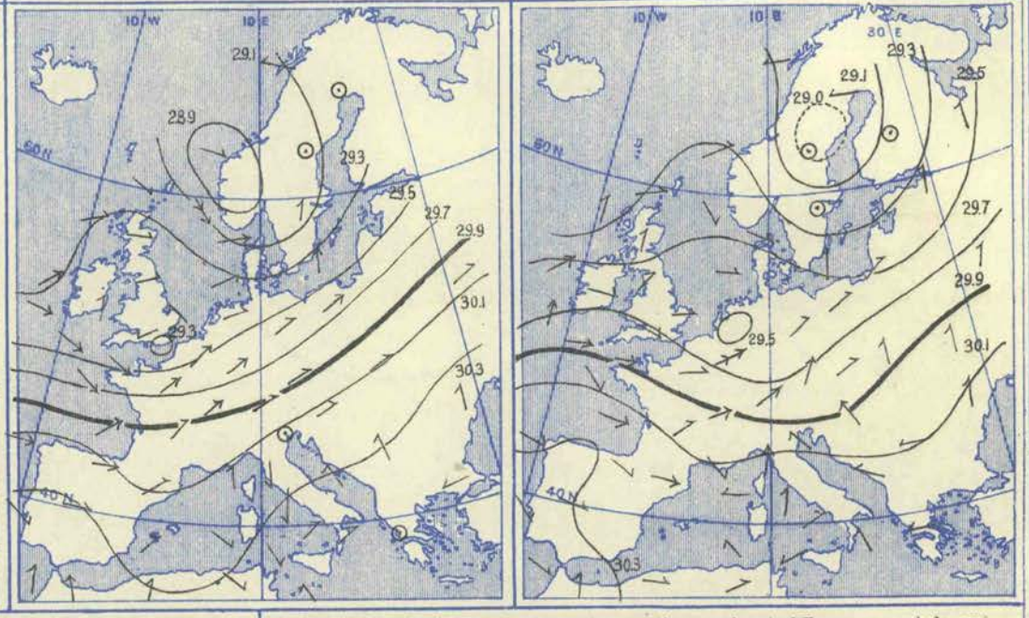
Temperature and Weather. 8 a.m.



Weather in morning fine in the north of Great Britain, but cloudy or dull in nearly all other parts of Europe, with heavy rain over the extreme south of England, Holland, and the north of France; rain falling also in Ireland, and at Skudesnaes and Karlstad. Some improvement taking place later in the west and south of our Islands, but considerable quantities of rain falling over the north-east of France, the Netherlands, and north Germany—as much as 2·6 ins. at Boulogne, and 1·3 ins. at Cape Gris Nez; lightning seen at Malin Head at night.

Temperature fallen decidedly in these Islands, but risen at most of the Continental stations. Morning readings highest, 62° at Barcelona, 59° at Palma, and 58° at Biarritz and Algiers; above 50° over France, Belgium, and western Germany. Lowest, (1) 27° at Haparanda, and 33° at Bodö; (2) 31° at Newton Reigny, and 32° at Dongahadee; below 35° at many of our own northern stations. Rising during day to 45° and upwards in the west and south of our Islands, and to 50° at Dungeness; exceeding 60° in many parts of southern Europe, and reaching 64° at Cape Béarn.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind Westerly or South-Westerly over western, northern, and central Europe as a whole, and strong to a gale in force over France, Belgium, and western Germany, as well as in the south of Scandinavia. Cyclonic circulation reported over the east and south of England, and the north-east of France. Light and variable over Austria, Italy, and Greece. Subsequently backing to the Southward in many parts of Ireland and Scotland; no important change occurring elsewhere.

Barometer highest, 30·3 ins. and upwards in an anticyclone lying over Algeria, the central and southern parts of Spain and Italy, and nearly the whole of south-eastern Europe and the Mediterranean. Lowest, 28·9 ins. and less in a well-marked cyclonic system over Norway; 29·3 ins. and less in a small secondary disturbance over the eastern part of the English Channel. Both disturbances moving in an east-north-easterly direction; new cyclonic area approaching our western coasts in evening.

IV.—GENERAL NOTES, etc.

Throughout this week the barometer was highest over southern Europe and the Mediterranean, and lowest in a series of cyclonic systems which moved in quick succession in a north-easterly direction from the Atlantic. In the earlier half of the period the paths of these disturbances lay at some little distance to the north-westward of our islands, so that while rough, unsettled weather prevailed on our western and northern coasts, the conditions in the eastern and southern districts were mostly fair and dry. On the 26th and 27th, however, the centre of a very deep cyclonic area advanced north-eastwards directly across the northern parts of our islands, its progress being accompanied by very severe gales from between South and West over nearly the whole kingdom, with heavy rain in many of the western and northern districts. At the close of the week the disturbance was passing away over Scandinavia and was rapidly becoming much shallower. A small secondary system was, however, moving eastwards across the English Channel and the Netherlands, and was causing heavy rains in all the surrounding regions, and on the evening of the 28th a new and larger disturbance was approaching our islands from the Atlantic.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Belgium, and Holland; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; at 8.0 a.m. in Spain, and 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands and Belgium; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.0 p.m. in Spain; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 44.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	10·9	− 6·8	16	− 10
STRATHPEFFER SPA	6·2	− 11·2	9	− 16
EDINBURGH	13·9	− 3·1	19	− 4
COCKLE PARK	25·5	—	36	—
NEWCASTLE-ON-TYNE	19·8	—	28	—
YORK	11·7	− 6·4	16	− 9
CROMER	21·2	—	29	—
LOWESTOFT	20·4	—	28	—
HOLLESLEY BAY	23·5	—	32	—
DUNMOW	18·3	—	25	—
SHEFFIELD	21·2	—	29	—
WORKSOP	16·6	− 1·3	23	− 2
THURCASTON	17·1	− 1·1	24	− 2
TUNBRIDGE WELLS	15·2	—	21	—
MARGATE	19·7	− 1·9	27	− 3
BROADSTAIRS				
RAMSGATE	—	—	—	—
EASTBOURNE	18·1	− 5·1	25	− 7
BRIGHTON	19·0	− 4·5	26	− 6
WORTHING	19·8	—	27	—
BOGNOR	25·3†	—	34	—
WATERGATE PARK	17·6	—	24	—
WESTBOURNE	24·4†	0·0	33†	0
VENTNOR HOSPITAL	19·0	− 6·0	26	− 8
BOURNEMOUTH	23·3	—	32	—
MARLBOROUGH	12·2	− 6·1	17	− 8
SOUTHPORT	20·8	—	29	—
RHYL	—	—	—	—
ABERDOVEY	28·7†	—	39†	—
TENBY	16·7	− 8·0	23	− 11
TORQUAY	20·9	− 2·4	28	− 3
NEWQUAY	?17·2	− 6·9	?23	− 9
GUERNSEY	21·3†	− 5·3	29†	− 7

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 9.] *Fourth Series.* WEEK ENDING SATURDAY, MARCH 7TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 50.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	48	25	42·2	31·8	36·8	1 below	Day-deg. 1	− 8	Day-deg. 34	Day-deg. 0	Day-deg. 81	Day-deg. + 17	Day-deg. 269	Day-deg. − 53
	1. SCOTLAND, EAST	52	23	42·5	30·8	36·5	2 below	1	−12	39	+ 2	114	+ 33	295	− 72
	2. ENGLAND, N.E.	52	30	46·0	33·8	39·7	0 average	11	− 3	30	− 1	155	+ 69	212	−101
	3. ENGLAND, EAST	55	29	48·2	34·9	41·3	1 above	17	− 1	27	− 7	196	+ 96	196	−152
	4. MIDLAND COUNTIES	54	30	47·4	34·3	40·6	1 above	15	− 5	29	− 4	186	+ 70	212	−138
	5. ENGLAND, SOUTH	55	30	48·6	37·4	42·9	2 above	26	+ 6	13	−13	204	+ 72	127	−140
Principal Grazing Districts.	6. SCOTLAND, WEST	50	32	44·3	34·9	39·5	1 below	6	− 6	26	− 1	128	+ 33	185*	− 78
	7. ENGLAND, N.W.	51	30	45·9	35·9	40·8	0 average	11	− 3	23	− 3	177*	+ 78	170	− 86
	8. ENGLAND, S.W.	56	31	48·8	37·9	43·2	1 above	26	+ 5	11	−10	233	+ 76	99	−103
	9. IRELAND, NORTH	52	28	45·8	34·1	39·8	2 below	11	− 7	29	+ 6	158	+ 25	180	− 45
	10. IRELAND, SOUTH	54	31	49·0	36·7	42·7	1 below	27	+ 3	15	− 2	257	+ 62	102	− 67
	— CHANNEL ISLANDS	54	39	50·2	42·1	46·0	1 above	28	+ 1	0	− 8	312	+ 90	33	− 53

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 50.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	10ths of in. 14	10ths of in. 4 more	50	+ 8	Ins. 17·5	Ins. + 7·3	16	− 2	21	− 3	61	− 40	11	− 8
	1. SCOTLAND, EAST	5	6	1 more	39	+ 5	8·9	+ 3·6	23	+ 2	30	+ 2	90	− 39	17	− 7
	2. ENGLAND, N.E.	4	4	0 average	31	− 1	3·4	− 0·3	25	+ 5	33	+ 7	115	− 18	20	− 3
	3. ENGLAND, EAST	6	7	4 more	28	− 6	2·7	− 0·9	16	− 8	21	−11	143	− 4	25	− 1
	4. MIDLAND COUNTIES	5	10	6 more	30	− 2	4·4	− 0·1	20	− 3	27	− 4	118	− 7	21	− 1
	5. ENGLAND, SOUTH	6	12	7 more	37	+ 5	4·9	0·0	15	− 8	20	−11	125	− 13	21	− 2
Principal Grazing Districts.	6. SCOTLAND, WEST	7	10	0 average	48	+10	14·9	+ 5·1	27	+ 6	35	+ 8	80	− 36	14	− 6
	7. ENGLAND, N.W.	6	11	6 more	41	+ 6	7·9	+ 2·3	24	+ 4	31	+ 5	122*	+ 3	22	+ 1
	8. ENGLAND, S.W.	6	21	14 more	42	+ 5	8·9	+ 1·6	23	− 1	30	− 1	122	− 32	21	− 6
	9. IRELAND, NORTH	7	12	6 more	48	+ 7	9·3	+ 3·2	31	+10	41	+14	106	− 22	19	− 4
	10. IRELAND, SOUTH	6	12	5 more	46	+ 6	9·9	+ 2·1	32	+ 8	42	+11	118	− 31	21	− 5
	— CHANNEL ISLANDS	7	16	11 more	44	+ 4	6·8	+ 0·7	23	− 6	30	− 8	148	− 32	25	− 5

* These values have been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was again very unsettled, but improved somewhat very generally. There were considerable intervals of clear sky at times, but falls of rain and hail (sleet or snow in the extreme north) were very frequent throughout the Kingdom. Lightning was observed on several occasions, and at a few southern stations there was thunder also.

Temperature differed but little from the mean, being 1° or 2° below it in Ireland and Scotland, just equal to it in England N.E. and N.W., and 1° or 2° above it in the other English districts. The highest of the maxima occurred, as a rule, on the 4th, and ranged from 56° in England S.W., and 55° in England S. and E., to 50° in Scotland W., and to 48° in Scotland N. The absolute minima were recorded on rather irregular dates; in Scotland E. and N. the thermometer fell to 23° and 25° respectively, but elsewhere the readings ranged from 28° in Ireland N. to 30° in most English districts, and to 39° in the Channel Islands.

Rainfall exceeded the mean in all districts excepting England N.E. and Scotland W. Over north-western, central, and southern England and in Ireland the fall was about twice as great as the average, and in England S.W. and the Channel Islands three times as great.

Bright Sunshine was considerably in excess of the mean in several western districts, but deficient in most eastern and southern localities and Scotland N. The percentage of the possible duration ranged from 42 or 41 in Ireland, to 35 in Scotland W., to 33 in England N.E., 21 in Scotland N., and to 20 in England S.

Barometer and Wind.—Barometric pressure was again very unstable, but not so low as in the previous week. Several cyclonic systems passed north-eastwards or eastwards over our Islands and their neighbourhood, those of the earlier days being of considerable depth. Strong winds or gales from between South and West (and occasionally North-West) were consequently experienced over the Kingdom as a whole, but there was a general tendency for the depressions to become less deep and the winds less strong as the week drew towards a close.

07 | 90 Wy & S. Ltd
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 49 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head Ⓢ	43	32	41·7	33·9	37·7	0·0	0	30	6	1·53	+ 0·83	*	*	*	*
	Stornoway Ⓢ	46	28	44·0	32·3	38·0	- 1·2	6	34	7	1·69	+ 0·85	23·9	+ 3·5	32	+ 5
	Wick Ⓢ	46	28	42·7	32·1	37·2	- 1·4	2	34	5	0·12	- 0·36	*	*	*	*
	Lairg Ⓢ	48	25	43·0	29·1	35·8	- 0·5	3	44	6	0·64	- 0·06	*	*	*	*
	Glencarron Ⓢ	42	26	40·4	29·9	35·0	- 2·5	0	49	7	1·93	+ 0·32	*	*	*	*
	Fort Augustus Ⓢ	46	29	41·2	30·7	35·8	- 2·9	0	43	6	2·37	+ 1·56	11·9	- 2·5	16	- 3
	Fort William Ⓢ	45	33	42·1	34·4	38·1	- 1·4	0	26	7	1·45	- 0·11	13·1	- 5·0	18	- 7
1. SCOTLAND, E.	Nairn Ⓢ	50	28	43·1	30·1	36·4	- 2·3	3	41	6	0·71	+ 0·33	*	*	*	*
	Aberdeen Ⓢ	48	29	44·1	32·4	38·1	- 1·1	6	34	3	0·11	- 0·42	29·4	+ 5·6	39	+ 8
	Braemar Ⓢ	39	23	37·3	27·5	32·3	- 3·2	0	68	6	0·94	+ 0·36	*	*	*	*
	Ochtertyre Ⓢ	47	29	42·6	30·3	36·3	- 2·5	2	40	7	0·94	+ 0·22	*	*	*	*
	Leith Ⓢ	52	32	45·0	33·3	39·0	- 1·5	8	32	6	0·65	+ 0·31	*	*	*	*
	Marchmont Ⓢ	48	30	43·0	31·1	36·9	- 1·2	3	38	4	0·35	- 0·21	23·8	+ 2·7	32	+ 4
2. ENGLAND, N.E.	Alnwick Castle	48	30	44·3	32·6	38·3	- 0·8	6	33	5	0·52	- 0·01	*	*	*	*
	Durham	49	30	44·6	32·8	38·5	- 0·5	7	33	3	0·24	- 0·18	31·8	+ 9·6	42	+ 13
	Shields	51	33	46·0	34·4	40·0	+ 0·1	11	28	2	0·20	- 0·18	*	*	*	*
	Scarborough Ⓜ	52	32	47·1	33·4	40·1	- 0·1	14	33	4	0·25	- 0·19	21·2	—	28	—
	Spurn Head	52	34	46·7	35·3	40·8	+ 1·0	13	25	4	0·46	+ 0·17	*	*	*	*
	Fulbeck (Lincolnshire)	51	32	47·5	34·1	40·6	+ 1·2	15	30	6	0·64	+ 0·32	21·2	—	28	—
3. ENGLAND, E.	Hillington Ⓜ	54	29	48·5	34·3	41·2	+ 1·1	18	30	6	0·99	+ 0·57	14·9	- 8·1	20	- 11
	Yarmouth	52	31	47·0	33·0	39·8	+ 0·4	14	34	6	0·52	+ 0·12	*	*	*	*
	Geldeston	54	32	48·4	34·3	41·1	+ 0·8	18	30	7	0·70	+ 0·34	16·5	- 8·7	22	- 11
	Cambridge	55	30	49·8	33·3	41·3	+ 0·8	22	34	6	0·44	+ 0·11	16·9	- 7·6	22	- 10
	Felixstowe	51	33	47·2	36·4	41·6	+ 1·3	15	22	6	0·63	—	21·6†	—	28†	—
	Rothamsted	53	32	47·6	34·6	40·9	+ 1·1	16	28	6	1·38	+ 0·96	14·4	- 8·8	19	- 12
	Shoeburyness	52	35	48·7	38·1	43·2	+ 2·4	25	11	5	0·36	+ 0·06	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	49	31	45·2	33·1	39·0	+ 0·2	9	32	5	0·96	+ 0·43	36·0	—	44	—
	Bawtry (Hesley Hall)	54	31	47·9	33·4	40·4	+ 0·2	17	32	4	0·49	+ 0·13	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	53	30	48·1	33·3	40·5	+ 0·5	17	33	3	0·51	+ 0·14	*	*	*	*
	Cheadle Ⓜ	47	30	45·0	33·4	39·0	0·0	8	31	6	1·27	+ 0·74	*	*	*	*
	Birmingham (Edgbaston)	50	32	46·4	34·7	40·4	+ 0·4	12	28	5	0·94	+ 0·59	12·0	—	16	—
	Churchstoke Ⓜ	54	30	47·7	33·0	40·1	+ 0·6	16	34	7	1·40	+ 0·91	23·9	+ 0·9	31	+ 1
	Hereford Ⓜ	54	34	? 49·3	36·4	42·7	+ 1·8	28	16	6	1·15	+ 0·73	*	*	*	*
	Cirencester	? 54	30	? 48·4	34·7	41·4	+ 1·9	18	29	6	1·30	+ 0·80	16·5	- 6·9	22	- 9
	Oxford	53	34	48·4	36·6	42·3	+ 1·5	25	15	6	1·12	+ 0·76	15·5	- 7·0	20	- 9
5. ENGLAND, S.	London	55	34	49·6	36·3	42·8	+ 1·5	30	16	6	0·72	+ 0·36	9·6‡	- 5·9‡	13‡	- 8‡
	Swarraton (Alresford) Ⓜ	54	30	48·1	35·5	41·6	+ 1·8	17	26	7	1·90	+ 1·37	*	*	*	*
	Dungeness	50	35	48·7	38·7	43·6	+ 2·8	25	9	6	0·59	+ 0·28	17·2	—	22	—
	Hastings (St. Leonards)	48	34	47·7	36·8	42·1	+ 1·0	23	15	7	0·93	+ 0·47	14·3	- 13·0	19	- 17
	Southampton	55	35	50·8	37·3	43·9	+ 1·5	33	13	6	1·18	+ 0·68	17·9	- 7·3	23	- 10
	Portland Bill	50	39	48·0	41·3	44·6	+ 1·3	21	2	6	1·18	—	*	*	*	*
	Shaftesbury Ⓜ	52	32	47·4	36·0	41·5	+ 1·6	15	23	6	1·59	+ 1·06	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	46	34	43·7	35·2	39·3	- 1·3	5	24	7	1·56	+ 0·08	*	*	*	*
	Glasgow	46	32	41·7	34·2	37·8	- 1·7	0	29	7	0·97	+ 0·33	17·7	+ 1·5	24	+ 2
	Cally Ⓢ	50	32	45·7	33·8	39·6	- 0·5	10	30	7	0·67	- 0·21	*	*	*	*
	Douglas (Isle of Man)	49	35	46·2	36·5	41·2	+ 0·1	12	21	5	0·64	- 0·06	35·4	+ 10·3	47	+ 14
7. ENGLAND N.W.	Newton Reigny	47	30	43·3	32·1	37·5	- 0·7	4	34	7	1·28	—	28·7	—	38	—
	Stonyhurst	47	33	44·5	35·0	39·6	- 0·1	7	25	7	1·71	+ 0·92	22·8	+ 2·3	30	+ 3
	Blackpool Ⓜ	49	32	46·6	36·3	41·3	+ 0·8	13	22	7	1·10	+ 0·58	24·1	+ 3·5	32	+ 5
	Manchester (Prestwich)	48	32	45·7	34·7	40·0	+ 0·2	10	27	6	1·10	+ 0·56	15·3	—	20	—
	Liverpool Obsy. (Bidston)	51	34	47·1	36·4	41·6	+ 0·6	14	22	6	0·40	+ 0·10	18·0	—	24	—
	Chester (Hawarden Bridge)				—	—	—	—	—	—	—	—	*	*	*	*
	Llandudno Ⓜ	50	35	47·7	38·9	43·2	+ 0·6	21	9	6	0·87	+ 0·39	27·1	+ 5·0	36	+ 7
	Holyhead	50	34	46·7	38·0	42·2	0·0	18	11	6	1·28	+ 0·75	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	7	3·28	+ 2·43	*	*	*	*
	Pembroke	50	39	47·7	40·9	44·2	+ 1·6	20	3	6	1·26	+ 0·69	24·8	- 1·3	32	- 2
	Clifton	51	34	48·5	38·9	43·6	+ 1·8	24	9	4	1·64	+ 1·09	*	*	*	*
	Bath	54	32	49·7	37·9	43·6	+ 2·1	28	11	5	1·57	+ 1·05	12·6	—	16	—
	Arlington (N. Devon)	50	33	46·4	35·7	40·9	+ 0·1	12	24	6	3·37	+ 2·51	*	*	*	*
	Cullompton Ⓜ	55	33	49·5	37·0	43·1	+ 0·8	29	14	6	1·92	+ 1·34	20·7	- 3·1	27	- 4
	Falmouth	54	37	49·3	38·0	43·5	- 0·6	27	11	7	1·76	+ 0·95	31·1	+ 3·7	40	+ 5
	Plymouth	56	31	50·2	36·8	43·3	- 0·1	31	15	7	1·57	+ 0·95	24·9	- 1·5	32	- 2
9 IRELAND, N.	Malin Head	45	32	42·9	35·3	39·0	- 2·9	3	23	7	1·32	+ 0·83	*	*	*	*
	Edenfel (Omagh)	47	28	44·0	32·6	38·1	- 1·4	6	33	7	1·59	+ 1·01	*	*	*	*
	Blacksod Point	50	31	47·1	36·1	41·4	- 1·8	14	23	7	1·52	+ 0·69	*	*	*	*
	Markree Castle	51	31	47·2	33·5	40·2	- 1·2	15	32	7	1·45	+ 0·79	27·8	+ 7·2	37	+ 10
	Armagh	52	32	47·3	34·0	40·5	- 0·3	15	31	6	0·53	+ 0·05	33·9	+ 13·6	45	+ 18
	Donaghadee	49	32	46·4	33·3	39·7	- 1·9	12	32	7	0·48	0·00	*	*	*	*
10. IRELAND,	Dublin	54	34	48·1	36·5	42·1	- 0·8	24	15	6	0·37	- 1·10	39·1	+ 15·1	51	+ 20
	Birr Castle	50	32	47·1	33·7	40·2	- 1·2	14	31	7	1·10	+ 0·60	34·0	+ 12·2	45	+ 16
	Kilkenny	52	31	48·9	34·9	41·7	- 0·6	19	28	5	0·77	+ 0·27	*	*	*	*
	Waterford	51	33	49·4	36·0	42·5	- 0·1	29	17	5	0·99	+ 0·29	*	*	*	*
	Roche's Point	52	36	49·7	39·3	44·4	+ 0·1	28	8	7	0·97	+ 0·12	*	*	*	*
	Valencia	52	36	49·1	40·0	44·4	- 0·8	25	6	7	1·06	+ 0·63	23·0	- 2·5	30	- 3
	Killarney	54	34	51·0	37·4	44·0	+ 0·2	33	13	7	2·32	+ 1·37	*	*	*	*
	Foynes	52	34	48·6	35·9	42·1	- 1·2	26	17	6	1·68	+ 1·03	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	40	49·9	42·0	45·8	0·0	27	0	7	1·38	+ 0·82	30·5	+ 2·3	40	+ 3
	Jersey	53	39	50·4	42·1	46·1	+ 2·2	29	0	7	1·85	+ 1·30	23·2	- 7·2	30	- 9

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster. For additional Reports of Sunshine, see last page.

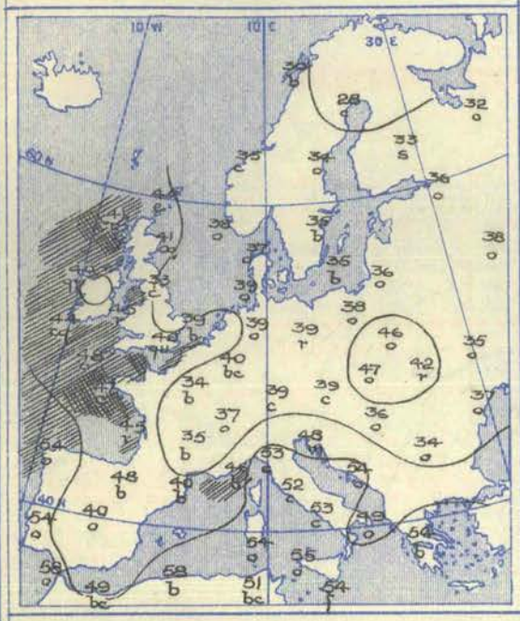
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

ERRATUM:—

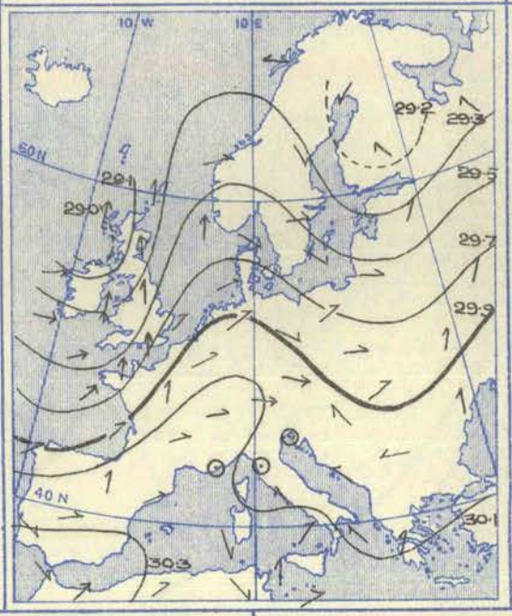
CLIFTON.—In the report ending 21st February, the rainfall values should read 3 days, 0·14 in. and 0·49 respectively.

Sunday, 1st March, 1903.

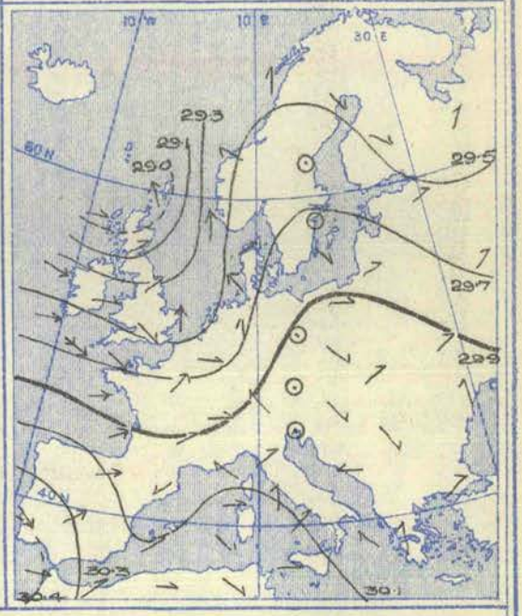
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over the greater part of our Islands and the Continent, with rain or passing showers at most of our western stations, as well as at Berlin and Rochefort; snow falling at Kuopio. Fine over the Netherlands and the central and southern parts of France, as well as in the south of Sweden. Rain falling during day over nearly the whole of western and central Europe—heavily at some of the western stations in our Islands and France; thunder heard at Jersey at noon.

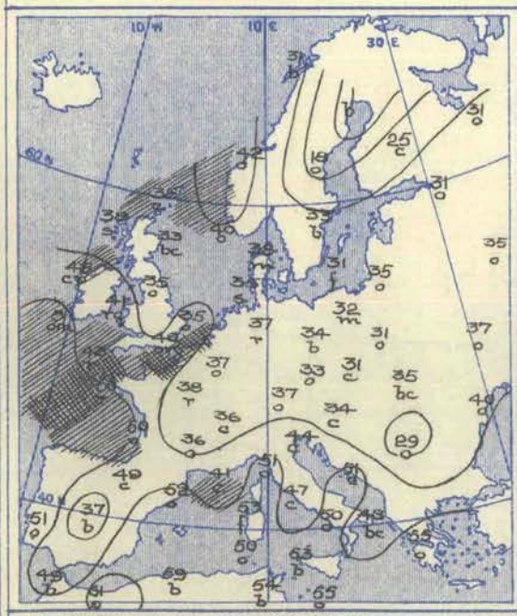
Temperature risen in our Islands and also in Austria and Italy, fallen in most other countries—quickly in France, Belgium, and Germany. Morning readings highest, 58° at Algiers and San Fernando, 56° at Barcelona, and 55° at Palermo; above 50° at most of the Mediterranean, Adriatic, and Spanish coast stations, and above 45° on our own south-west coasts. Lowest, 28° at Haparanda, 30° at Bodö, and 32° at Archangel. Rising during day to between 45° and 50° over the United Kingdom generally, and to 52° at Valencia; exceeding 60° over Spain and the southern parts of France and Italy, and reaching 69° at Palermo and 73° at Alicante.

Wind Westerly or South-Westerly in Ireland, but Southerly over Great Britain and France, with a fresh gale in the St. George's Channel. South-Westerly over the Netherlands, and Westerly or North-Westerly over Scandinavia, Denmark, and Germany; variable over Italy and the south of France; Westerly or North-Westerly over the Spanish Peninsula. Subsequently veering to the South-Westward or Westward over Great Britain and France, and increasing to a gale in the English Channel.

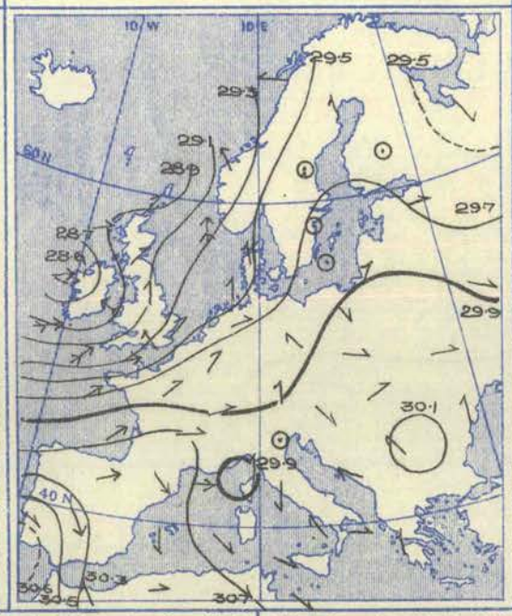
Barometer highest, 30·3 ins. and upwards over Morocco and the south of Spain; 30·1 ins. and upwards in an anticyclone covering the greater part of France and southern Europe. Lowest, 29·0 ins. and less in a cyclonic system off the west of Scotland (V-shaped secondary lying over the St. George's and Bristol Channels); 29·2 ins. and less in a shallow area over Lapland and Finland. Disturbance off the west of Scotland subsequently travelling north-eastwards; V-shaped secondary system moving eastwards across England; barometer rising decidedly on our western coasts.

Monday, 2nd March, 1903.

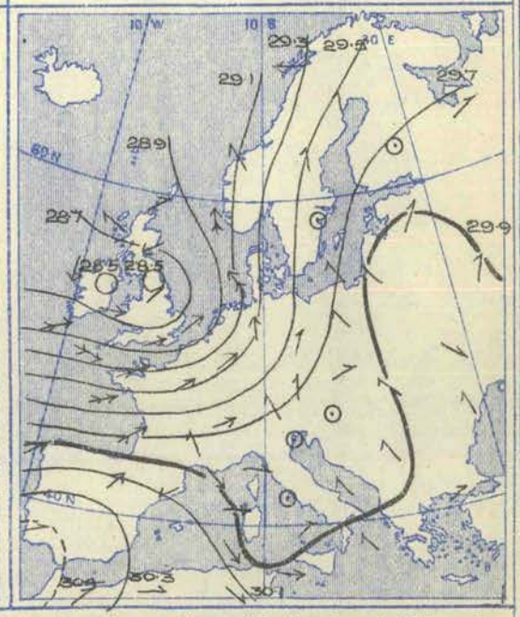
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over Europe as a whole, with rain in the west and south of our Islands and the northern and central parts of France, as well as at Cuxhaven; snow reported at Fanö. Fine in the east of Scotland, and also in the north of Scandinavia and the southern parts of France and Italy. Rain falling later over western and southern Europe generally—heavily in the Channel Islands and many parts of France and Italy; amounts reported next morning as large as 1·6 ins. at Lorient, and 1·4 ins. at Charleville.

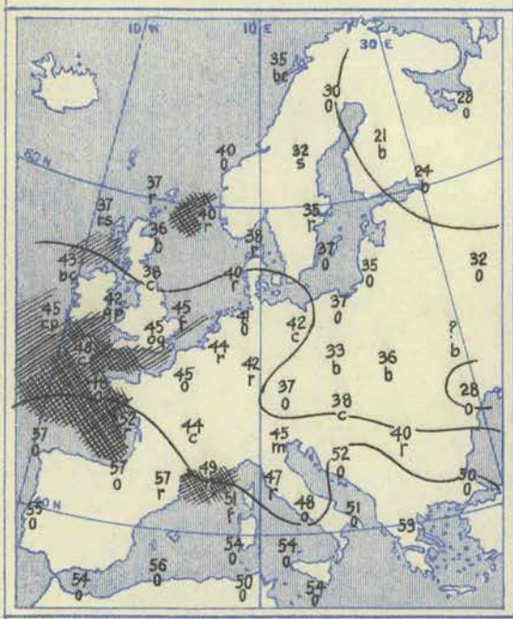
Temperature fallen over Great Britain and also in many parts of eastern and central Europe; risen in most other localities. Morning readings highest, 61° at Nemours, 59° at Oran and Algiers, and 58° at Alicante; above 50° at most of the Mediterranean stations. Lowest, 1° at Haparanda, 14° at Uleaborg, 18° at Hernösand, and 25° at Kuopio; below the freezing point over central Scotland. Rising during day to 50° or slightly above it at most of our own western and southern stations; exceeding 55° over southern Europe generally, and exceeding 60° in some parts of southern Italy, the highest reading reported being 67° at Palermo.

Wind strong from the South-Westward on all our southern and the French coasts (with a gale in the extreme south-west), and moderate from the same quarter over Germany and the Netherlands; Southerly in Denmark and Norway, with a gale at Skudesnaes; calm in Sweden; light from the Westward over Russia. Rather variable in Italy, but chiefly South-Easterly; light to fresh, from the North-Westward over the Spanish Peninsula. Subsequently veering to the Westward in the south of England and increasing to a gale at the Channel stations; shifting to the Eastward in Scotland.

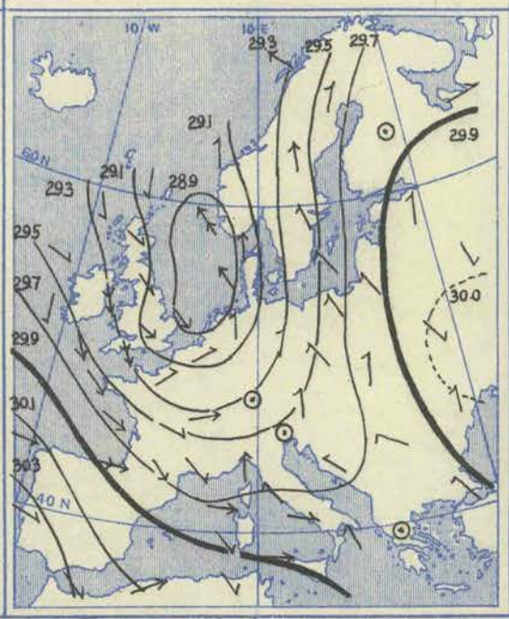
Barometer highest, 30·6 ins. and upwards to 30·2 ins. over the Spanish Peninsula and Algeria. Lowest, 28·6 ins. and less in a well-marked depression with its centre off the north-west of Ireland, 29·5 ins. and less in a shallow disturbance over northern Russia. Cyclonic system off the Irish coasts proving somewhat complex, and subsequently advancing eastwards over the northern parts of Ireland and England; barometer falling briskly over the whole of Great Britain.

Tuesday, 3rd March, 1903.

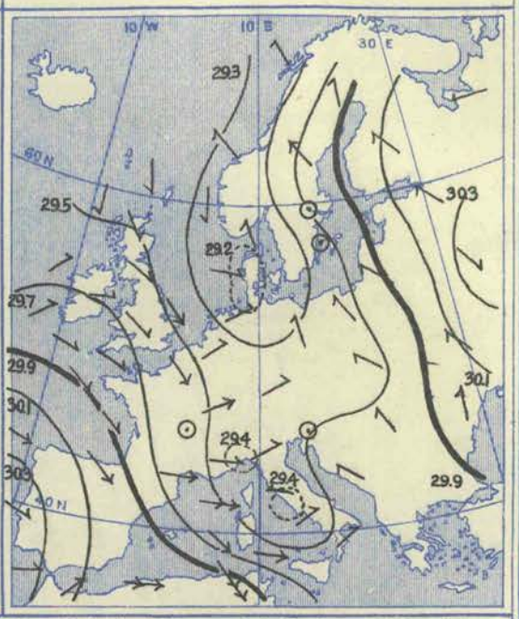
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast in nearly all parts of our area; showery at many of our own stations, with sleet at Stornoway, and rainy over Belgium, France, Italy, Greece, and on the eastern shores of the North Sea. Rain or snow falling over the Gulf of Bothnia. Rain experienced in most regions during day—largest amounts, 0·7 in. at Rome, 0·8 in. at Faerder and Palermo, and 1·1 ins. at Limoges and Patras. Lightning at night on some parts of our north-western coasts.

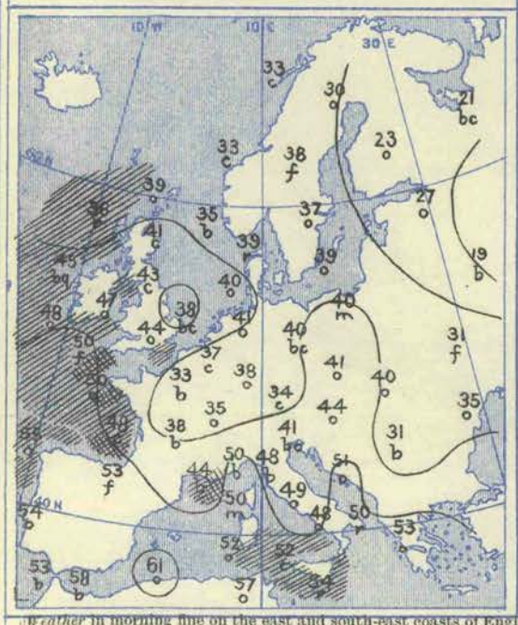
Temperature fallen at most Russian Algerian, and Irish stations, but risen elsewhere. Readings at 8 a.m. highest, 57° at Corunna, Biarritz, and Perpignan, 56° at Algiers, and above 50° in the far south generally. Lowest, 21° at Knopio, 32° or below in the north of Sweden, and in most Russian districts, 36° or 37° in Scotland and over central Ireland. Rising later to 50° or slightly above it at Leith, and on our south-west coasts, to 60° at Brindisi and Palermo, 61° at Nice, 63° at San Fernando, and to 72° at Oran. Maxima no higher than 50° at Florence and Trieste.

Wind in morning showing a complete cyclonic circulation around the North Sea, the Northerly and North-Westerly winds over our Islands, the North-West and Westerly winds over France and the Bay of Biscay, and those from South-East over Denmark and the south of Norway, all being strong to a gale in force. Light and variable or anticyclonic airs prevailing over Russia. Force of wind decreasing in most regions later, and becoming light from the South-Westward in Ireland. Two separate cyclonic movements setting in around Italy and the Gulf of Genoa, the North-Westerly and Westerly currents over Corsica, Sardinia, Algeria, and Sicily, being strong to a gale.

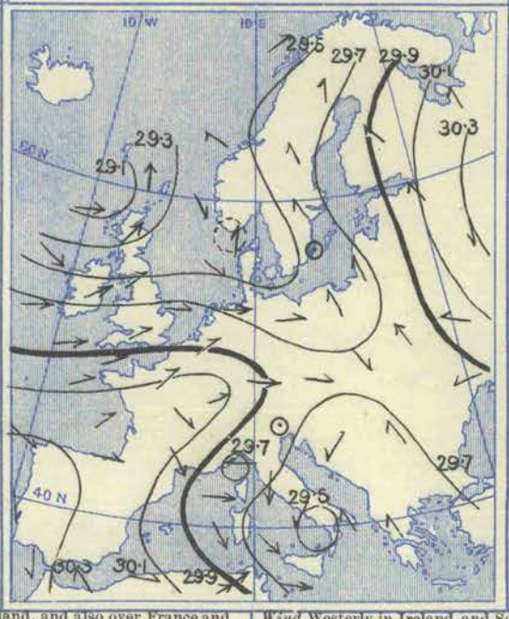
Barometer at 8 a.m. ranging from 30·38 ins. at Lisbon, and above, 30·0 ins. in the south of Russia, to below 29·0 ins. in a large and complex disturbance over the North Sea. Latter system becoming much less deep by evening, but two separate baric minima forming in south—one over the Gulf of Genoa, and the other over central Italy. Pressure increasing quickly over Great Britain, but rise of barometer slackening greatly in Ireland.

Wednesday, 4th March, 1903.

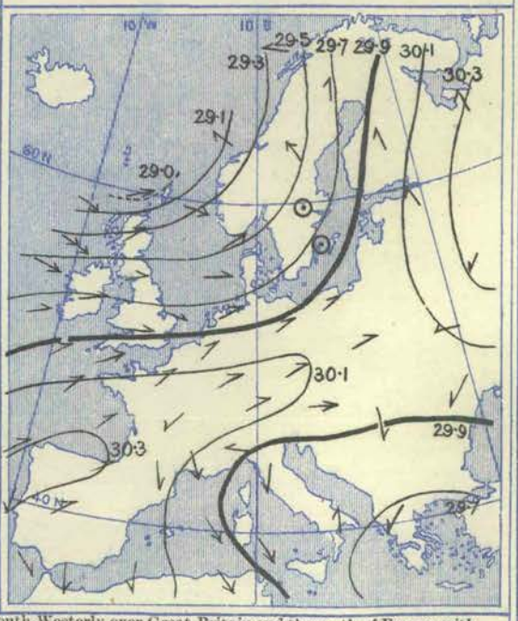
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine on the east and south-east coasts of England, and also over France and the Netherlands; cloudy or dull in nearly all other parts of Europe, with rain at several of our own western and northern stations, as well as in the north of Denmark and the south of Norway; rain falling also at Brindisi, Patras, and Malta. Rain falling later over north-western Europe generally, but quantity slight as a rule; lightning seen at night in the north of Ireland, and also at Lorient.

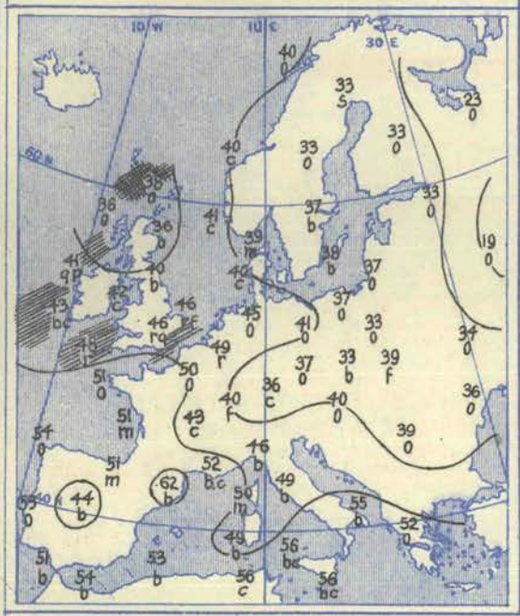
Temperature fallen in the east of England, and also over the Netherlands, France, and western Germany; risen in most other parts of Europe. Morning readings highest, 61° at Algiers, 60° at Bilbao, 58° at Oran, and 57° at La Calle; above 50° at most of the Mediterranean, Adriatic, and Spanish coast stations, and very little below it on our own southern coasts. Lowest, 19° at Moscow, 21° at Archangel, and 27° at St. Petersburg; below 35° over central France and south Germany. Rising during day to 50° and upwards in most parts of England and the south of Ireland, and to 55° in London; exceeding 60° in many parts of southern Europe, and reaching 72° at San Fernando.

Wind Westerly in Ireland, and South-Westerly over Great Britain and the north of France, with a moderate gale on several parts of our north-west coasts. Westerly in Germany and Austria; South-Easterly in Russia and Sweden; Northerly in the south of Norway. Strong cyclonic circulation reported over Italy and the western parts of the Mediterranean. Subsequently veering to the Westward over England; no decided change occurring elsewhere.

Barometer highest, 30·4 ins. and upwards, to 30·2 ins. in an anticyclone over the Spanish Peninsula and the south-west of France; 30·3 ins. and upwards in another system over central Russia. Lowest, 29·1 ins. and less in a cyclonic disturbance lying off the north of Scotland; 29·5 ins. and less in another system over southern Italy. Disturbance off our northern coasts subsequently moving away to the north-eastward; depression over Italy travelling south-eastwards.

Thursday, 5th March, 1903.

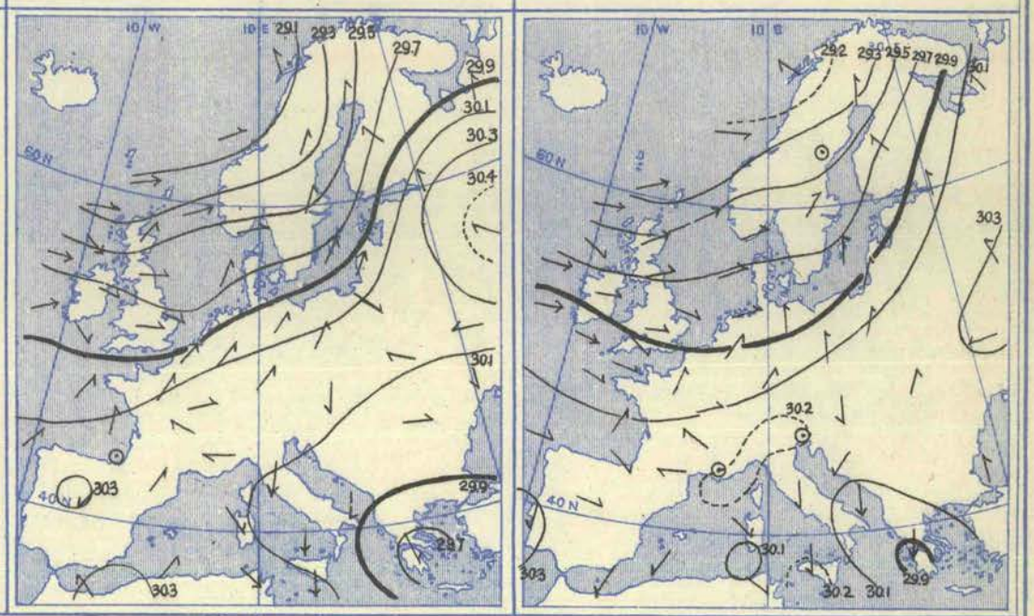
Temperature and Weather. 8 a.m.



Weather in morning fine and bright in the Riviera, Italy, several parts of Spain, and over Algeria; cloudy or dull elsewhere, with showers in the north of Ireland, rain in the south and south-east of England and the Netherlands, and snow at Haparanda. Rain falling very generally later over the United Kingdom and all the north-western countries of the Continent, and snow or rain in the far north. Largest amounts, 0·6 in. at Malin Head, and 1·1 ins. at Nancy. Remaining fine and dry over Italy and on most shores of the Mediterranean.

Temperature changed irregularly. 8 a.m. readings highest, 62° at Barcelona, 56° at La Calle, Palermo, and Malta, and 54° at Corunna. Lowest, 19° at Moscow, 23° at Archangel, 33° in the north of Sweden and at Cracow, 35° at Nicolaieff, Wick, and Parsonstown, 38° at Pesaro, and 40° at Florence. Rising subsequently to 53° at Jersey, 61° at Lyons and Nice, 67° at Perpignan, 68° at Madrid and Barcelona, and to 73° at Oran. Maxima very little above 50° over Austria-Hungary, Germany, and the north-east of France, and as low as 50° at Lesina.

Barometer and Wind. 8 a.m. and 6 p.m.

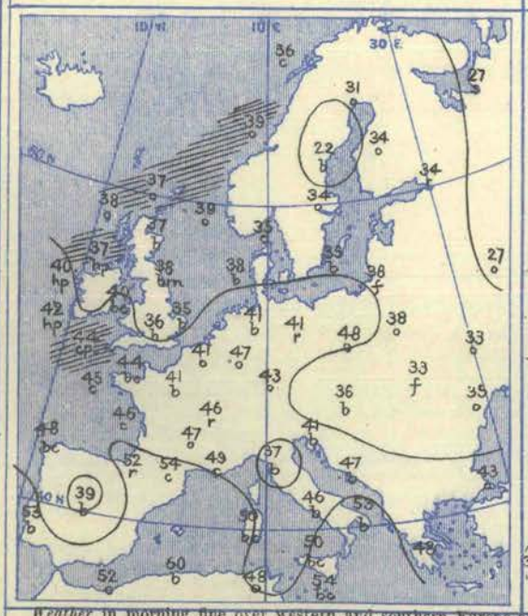


Wind in morning light to fresh or strong from between North-West and South-West over the United Kingdom, moderate or fresh from south-west over France, Germany, and Denmark, and drawing into South over Sweden, and into South-East at Bodö. Light and anticyclonic over Russia and the Iberian Peninsula, but cyclonic Northerly over Greece, Italy, and Tunis. No important or general change during day.

Barometer risen in most regions, but fallen in Finland, Scandinavia, the Netherlands, over our south-east coasts, France, and Spain. Readings at 8 a.m. ranging from 30·45 ins. in an anticyclone over central Russia, and 30·3 ins. in another system over central Spain, to 29·7 ins. and less (1) in a depression over Greece, and (2) in a secondary disturbance over the southern part of the North Sea, and to below 29·1 ins. in a large low-pressure system lying off the west of Norway. Depressions becoming less deep during day—especially that over Greece. Russian anticyclone giving way somewhat, and that over Spain receding westwards.

Friday, 6th March, 1903.

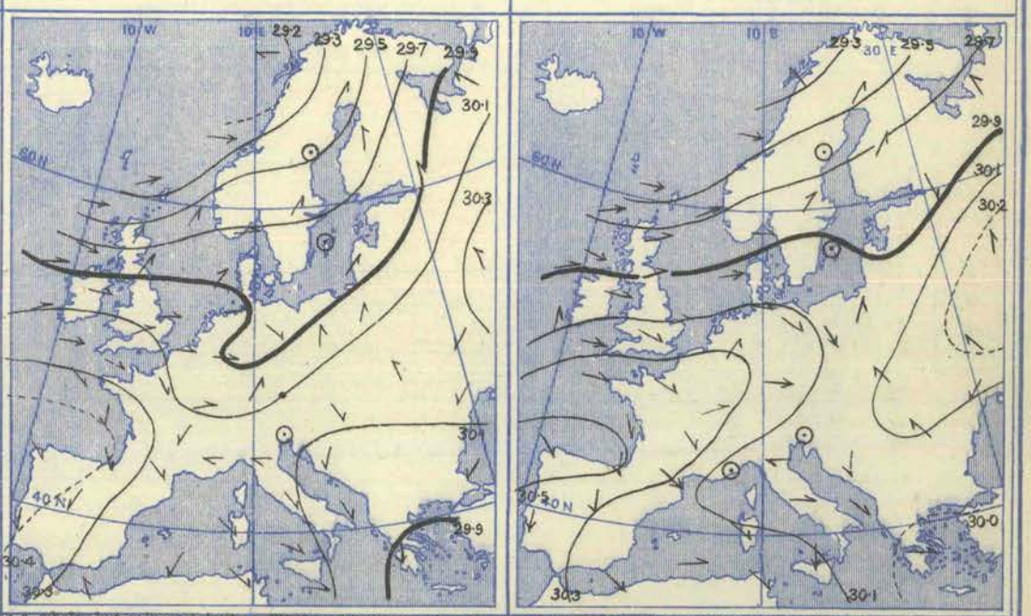
Temperature and Weather. 8 a.m.



Weather in morning fine over western and southern Europe as a whole, but rain and hail showers reported on our extreme west and south-west coasts, and snow at Newton Reigny; rain falling also at Biarritz and Bilbao. Fine in Sweden, but cloudy over the northern and central parts of the Continent generally, with rain at Berlin and Swinemünde. Rain falling later in most parts of western and central Europe, but in no great quantity; thunder and lightning occurring at Malin Head and Parsonstown, and lightning seen at night at many of our western and extreme northern stations.

Temperature changed very little in Ireland and Scotland, but fallen over England and the greater part of the Continent. Morning readings highest, 62° at La Calle, 60° at Algiers, and 57° at Barcelona, above 50° at most of the Mediterranean and Spanish coast stations. Lowest, 22° at Hernösand, 27° at Archangel and Moscow, and 31° at Haparanda; below 35° in most parts of Sweden, Russia, and Austria, and as low as that point in several parts of the United Kingdom. Rising during day to between 45° and 50° over our Islands generally exceeding 60° over Spain and the extreme southern parts of France and Italy.

Barometer and Wind. 8 a.m. and 6 p.m.

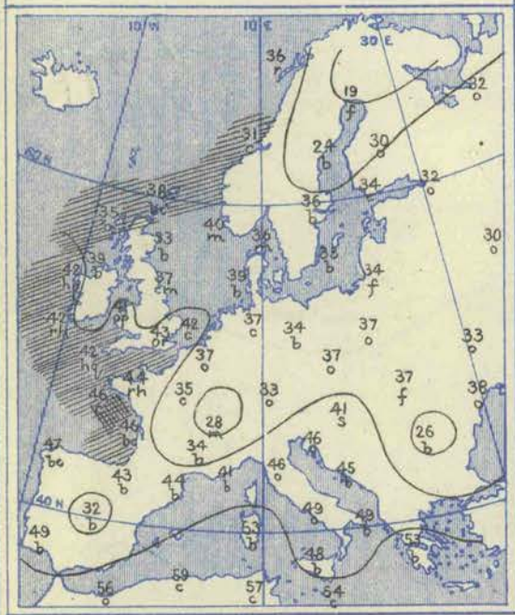


Wind moderate to strong from the Westward in the west and south of our Islands; light to moderate from the North-Westward in France and Italy, and from the Northward over the Spanish Peninsula. Light to moderate from the South-Westward in the eastern parts of Great Britain, and also over Scandinavia and Denmark; Southerly in Russia; variable in Austria. Subsequently backing to the South-Westward or Southward in Ireland; no material change occurring elsewhere.

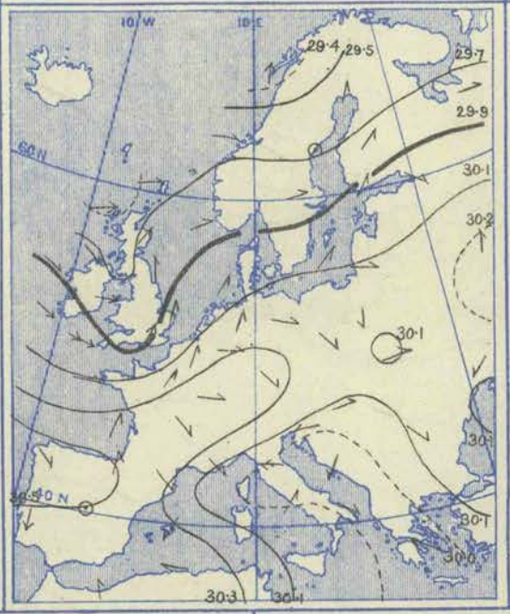
Barometer highest, 30·4 ins. and upwards in an anticyclone lying over the northern and western parts of the Spanish Peninsula; 30·3 ins. and upwards in another system over central Russia. Lowest, 29·2 ins. and less in a large cyclonic area lying off the northern parts of the Norwegian coasts. Spanish high-pressure system subsequently spreading north-eastwards over France; cyclonic area off the Norwegian coasts travelling away in a similar direction.

Saturday, 7th March, 1903.

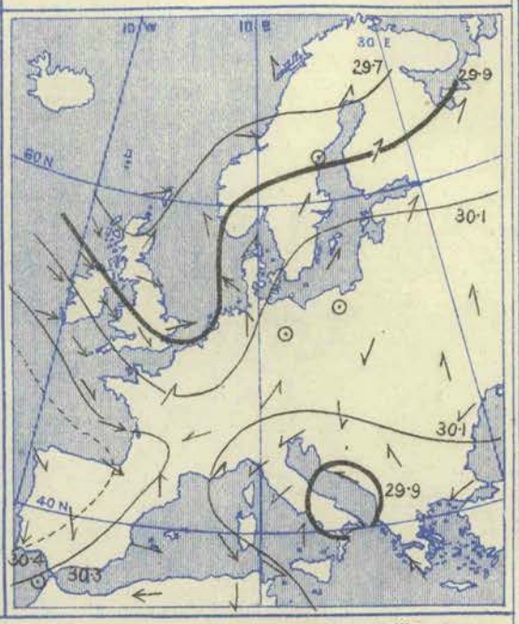
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in the eastern parts of Ireland and Scotland, but cloudy and showery over the United Kingdom as a whole, with hail on our extreme west and south-west coasts. Dull in the western and central parts of the Continent, with rain at Bodö and Brest, with snow at Cracow and Buda Pesth. Hail or sleet showers falling later in many parts of the United Kingdom, and rain over the Netherlands, France, and northern Italy, and thunder and lightning occurring at Jersey; lightning seen at Holyhead at night.

Temperature risen in the south and east of England, and also in Sweden, Denmark, and Italy, fallen in nearly all other parts of Europe. Morning readings highest, 57° to 59° on the Algerian coasts, 56° at Nemours, and 55° at Palma; above 50° at most of the Mediterranean stations. Lowest, (1) 19° at Haparanda, 24° at Hernösand, and 25° at Uleaborg; (2) 26° at Hermanstadt, and 28° at Belfort; below 35° over eastern and central Scotland, and below 40° over the northern parts of the United Kingdom generally. Daily maxima below 45° at all our own northern stations, but thermometer exceeding that point on our extreme western and southern coasts, and exceeding 60° in Spain and southern Italy.

Wind Westerly or North-Westerly on our western coasts, with a strong gale at Scilly; strong to a gale from the South-Westward in the eastern parts of the Channel, and light to moderate from the same quarter in the western and northern parts of the Continent; Southerly on the east coasts of Great Britain. North-Westerly in the south of France and the north of Spain; variable in Greece and Italy. Subsequently veering to the North-Westward over the whole of Great Britain, and blowing a slight gale in the Irish Sea; no important change occurring elsewhere.

Barometer highest, 30·5 ins. and upwards in an anticyclone over the northern parts of the Spanish Peninsula; 30·2 ins. and upwards in another system over the southern part of Russia. Lowest, 29·4 ins. and less in a cyclonic area off the north-west of Norway; 29·6 ins. and less to 29·9 ins. in a V-shaped secondary system passing across our own Islands; 30·0 ins. and less in a shallow area over Italy and Greece. Secondary disturbance over the United Kingdom moving eastwards later to the North Sea; barometer rising briskly in its rear.

IV.—GENERAL NOTES, etc.

In the early part of the week the highest pressures still lay over southern Europe, while cyclonic disturbances continued to advance over our Islands from the Atlantic. The depression of Sunday (a "V-shaped" system) was of little importance, but that of Monday was deeper and more complex, and, as its central portion moved across the northern parts of the kingdom, gales from the Westward or North-Westward prevailed over the whole of Ireland and England. On reaching Denmark the disturbance quickly dispersed, this movement being accompanied, however, by the development of another complex area of low-pressure over Italy and the neighbouring parts of the Mediterranean. The anticyclonic system hitherto prevailing over southern Europe was in this way divided, and for the remainder of the week two such areas existed—one over central Russia, and the other over, or a little to the westward of, the Spanish Peninsula. For a time the latter system spread northward, and occasioned some improvement in the weather over our Islands. At the close of the week, however, another "V-shaped" cyclonic disturbance advanced over us from the Atlantic, so that strong winds from South-West, shifting to North-West, were very general, with squalls of rain, hail, and sleet.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 50.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
	☉													
DEERNESS	13·6	− 6·6	18	− 9	SHEFFIELD	24·5	—	32	—	WESTBOURNE	17·8†	− 9·6	23†	− 13
STRATHPEFFER SPA	17·2	− 1·0	23	− 1	WORKSOP	19·9	− 0·1	26	0	VENTNOR HOSPITAL	18·4	− 9·9	24	− 13
EDINBURGH	15·3	− 3·3	20	− 4	THURCASTON	18·1	− 1·9	24	− 3	BOURNEMOUTH	24·0	—	31	—
COCKLE PARK	30·4	—	40	—	TUNBRIDGE WELLS	10·5	—	14	—	MARLBOROUGH	15·7	− 4·9	20	− 6
NEWCASTLE-ON-TYNE	23·8	—	32	—	MARGATE	15·1	− 9·0	20	− 12	SOUTHPORT	25·0	—	33	—
YORK	20·5	+ 0·3	27	0	BROADSTAIRS	16·9	—	22	—	RHYL	28·3	—	37	—
CROMER	19·1	—	25	—	RAMSGATE	—	—	—	—	ABERDOVEY	29·0†	—	38†	—
LOWESTOFT	19·6	—	26	—	EASTBOURNE	13·5	− 13·0	18	− 17	TENBY	18·0	− 9·6	24	− 13
HOLLESLEY BAY	18·6	—	24	—	BRIGHTON	14·6	− 11·7	19	− 15	TORQUAY	28·2	+ 1·2	37	+ 2
DUNMOW	13·6	—	18	—	WORTHING	18·2	—	24	—	NEWQUAY	24·1	− 2·9	31	− 4
					BOGNOR	21·3†	—	28†	—	GUERNSEY	15·4†	− 13·9	20†	− 18
					WATERGATE PARK	—	—	—	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Feb. 7th, 1903.	Tenby	—	—	—	—	—	—	—	—	—	—	—	10·2	− 7·7	16	− 12
" " " 21st, "	Bognor	—	—	—	—	—	—	—	—	—	—	—	22·2	—	32	—
" " " 28th, "	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	20·7	—	28	—
" " " " "	Rhyl	—	—	—	—	—	—	—	—	—	—	—	? 24·6	—	? 34	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 10.] *Fourth Series.* WEEK ENDING SATURDAY, MARCH 14TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to the volume of the *Weekly Weather Report* for 1901, page IV.

Temperature of the Air.

	DISTRICTS. (See p. 56.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	52	28	46·5	35·6	40·9	2 above	13	+ 3	25	- 7	94	+ 20	294	- 60
	1. SCOTLAND, EAST	53	28	47·1	34·6	40·7	2 above	14	0	28	- 7	128	+ 33	323	- 79
	2. ENGLAND, N.E.	56	30	48·4	36·0	42·1	2 above	26	+10	17	-13	181	+ 79	229	-114
	3. ENGLAND, EAST	58	25	49·5	34·5	41·7	1 above	21	0	29	- 3	217	+ 96	225	-155
	4. MIDLAND COUNTIES	58	28	48·6	35·4	41·8	1 above	18	- 4	26	- 6	204	+ 66	238	-144
	5. ENGLAND, SOUTH	59	24	49·9	36·7	43·1	2 above	30	+ 8	15	-10	234	+ 80	142	-150
Principal Grazing Districts.	6. SCOTLAND, WEST	54	30	48·1	37·1	42·4	2 above	23	+ 9	14	-12	151	+ 42	199	- 90
	7. ENGLAND, N.W.	53	31	47·6	37·9	42·6	2 above	21	+ 5	11	-14	198	+ 83	181	-100
	8. ENGLAND, S.W.	55	29	49·3	38·8	43·9	1 above	27	+ 5	9	-12	260	+ 81	108	-115
	9. IRELAND, NORTH	51	27	47·9	35·3	41·4	0 (average)	17	- 3	26	+ 3	175	+ 22	206	- 42
	10. IRELAND, SOUTH	53	28	48·5	35·6	41·9	2 above	18	- 8	26	+10	275	+ 54	128	- 57
	— CHANNEL ISLANDS	54	32	51·0	40·4	45·6	0 (average)	32	+ 4	4	- 4	344	+ 94	37	- 57

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 56.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	12	2 more	55	+ 8	18·7	+ 7·6	18	- 2	23	- 3	79	- 42	13	- 7
	1. SCOTLAND, EAST	4	5	0 (average)	43	+ 5	9·4	+ 3·6	22	- 1	27	- 2	112	- 40	18	- 6
	2. ENGLAND, N.E.	3	3	1 less	34	- 2	3·7	- 0·4	22	- 3	28	- 4	137	- 21	21	- 3
	3. ENGLAND, EAST	3	3	1 less	31	- 6	3·0	- 1·0	33	+ 6	41	+ 7	176	+ 2	27	0
	4. MIDLAND COUNTIES	4	8	4 more	34	- 1	5·2	+ 0·3	18	- 4	23	- 5	136	- 11	21	- 2
	5. ENGLAND, SOUTH	3	2	3 less	40	+ 4	5·1	- 0·2	33	+ 5	41	+ 6	158	- 8	24	- 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	18	9 more	55	+13	16·7	+ 6·0	19	- 4	25	- 5	99	- 40	16	- 6
	7. ENGLAND, N.W.	5	9	3 more	46	+ 7	8·8	+ 2·6	19	- 5	24	- 7	141	- 2	22	0
	8. ENGLAND, S.W.	5	9	3 more	47	+ 6	9·8	+ 1·8	21	- 9	26	-11	143	- 41	21	- 6
	9. IRELAND, NORTH	5	6	0 (average)	53	+ 7	9·9	+ 3·3	22	0	28	0	128	- 23	20	- 4
	10. IRELAND, SOUTH	5	11	4 more	51	+ 7	11·0	+ 2·6	23	- 4	28	- 4	141	- 34	22	- 5
	— CHANNEL ISLANDS	5	4	1 less	49	+ 5	7·2	+ 0·6	35	+ 3	43	+ 4	183	- 28	27	- 4

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded.

General Remarks.

Weather continued dull and rainy in all the western and northern districts, and this condition occasionally extended to the southern and eastern counties also, where, however, the general character of the weather was much fairer than of late. A slight thunderstorm was experienced at Rothamsted on Saturday afternoon.

Temperature was one or two degrees above the mean over the Kingdom as a whole, but just equal to it in Ireland N. and the Channel Islands. The highest of the maxima were recorded on Friday at most English stations, but on irregular dates over Ireland and Scotland. They ranged from 59° in England S. (in London), and 58° in England E. and the Midland Counties, to 51° in Ireland N. The lowest of the minima, which were registered about the middle of the week generally, varied from 24° in England S., and 25° in England E., to 30° in England N.E. and Scotland W., 31° in England N.W., and to 32° in the Channel Islands.

Rainfall was more than the mean in most districts, but only just equal to it in Scotland E. and Ireland N., and less in England N.E., E., and S., and also in the Channel Islands. In Scotland W. the fall was just twice as great as the mean.

Bright Sunshine exceeded the normal in England E., England S., and the Channel Islands, and was equal to it in Ireland N.; elsewhere, however, there was a deficiency. The percentage of the possible duration ranged from 43 in the Channel Islands, and 41 in England S. and E., to less than 30 in all other districts, and to 23 in Scotland N. and the Midland Counties.

Barometer and Wind.—Cyclonic disturbances were again very numerous over our Islands and their immediate neighbourhood. They were, however, less deep than those of the two preceding weeks, and, while the centres of the primaries moved northwards or north-eastwards outside our western and north-western coasts, some of the secondaries took a more easterly course and travelled immediately across the Kingdom. The general direction of the wind was Southerly or South-Westerly, veering to North-West or even to North at times over the western and south-western districts. It frequently blew freshly or strongly—especially in the west and north-west—but only attained gale force on Wednesday, and then it was limited to the Irish coasts.

07 | 90 Wy & S. Ltd
31d | 70 12 | 02

II.—DATA from which the SUMMARY on page 55 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	46	33	44·6	38·3	41·4	+ 3·5	7	14	5	0·57	− 0·09	*	*	*	*
	Stornoway	50	32	47·7	35·3	41·3	+ 2·0	16	26	6	1·49	+ 0·68	22·5	+ 0·3	29	0
	Wick	50	30	47·0	35·3	41·0	+ 2·1	14	26	2	0·33	− 0·13	*	*	*	*
	Lairg ℛ	52	28	46·3	33·0	39·5	+ 2·7	12	33	4	0·48	− 0·22	*	*	*	*
	Glencarron ℛ	50	31	46·6	35·0	40·6	+ 2·8	13	26	6	2·23	+ 0·67	*	*	*	*
	Fort Augustus ℛ	51	29	46·0	35·0	40·3	+ 1·1	11	26	6	0·85	+ 0·11	9·1	− 6·2	13	− 8
	Fort William	50	33	47·0	37·4	42·1	+ 2·3	20	13	6	2·08	+ 0·66	9·5	− 10·5	12	− 13
1. SCOTLAND, E.	Nairn	53	30	48·7	34·9	41·6	+ 2·1	19	28	3	0·14	− 0·23	*	*	*	*
	Aberdeen	49	30	46·7	35·1	40·7	+ 1·1	13	26	2	0·14	− 0·38	21·7	− 4·1	28	− 5
	Braemar ℛ	45	29	43·2	32·7	37·8	+ 2·0	3	32	4	0·63	+ 0·07	*	*	*	*
	Ochtertyre ℛ	52	28	47·6	33·7	40·4	+ 1·0	16	31	7	1·21	+ 0·55	*	*	*	*
	Leith	53	33	49·7	36·7	43·0	+ 2·1	29	15	3	0·48	+ 0·17	*	*	*	*
	Marchmont ℛ	49	31	46·4	34·7	40·4	+ 1·9	12	28	4	0·53	− 0·01	22·3	− 0·2	28	0
2. ENGLAND, N.E.	Alnwick Castle	52	31	48·3	36·0	42·0	+ 2·5	18	17	2	0·14	− 0·39	*	*	*	*
	Durham	51	31	47·7	35·6	41·5	+ 2·0	16	25	3	0·24	− 0·20	22·7	− 1·6	29	− 2
	Shields	54	33	49·1	36·0	42·4	+ 2·2	28	17	3	0·13	− 0·25	*	*	*	*
	Scarborough ℳ	56	30	49·8	35·6	42·5	+ 1·9	30	18	4	0·45	+ 0·03	20·0	—	25	—
	Spurn Head	52	35	47·1	37·0	41·9	+ 1·6	14	20	3	0·27	0·00	*	*	*	*
	Fulbeck (Lincolnshire)	56	31	48·4	35·9	42·0	+ 1·9	18	17	4	0·60	+ 0·30	22·3	—	28	—
3. ENGLAND, E.	Hillington ℳ	57	30	50·6	34·4	42·3	+ 1·5	34	21	3	0·47	+ 0·09	28·1	+ 3·0	35	+ 4
	Yarmouth	48	32	46·3	35·1	40·5	+ 0·6	12	26	2	0·16	− 0·24	*	*	*	*
	Geldeston	57	30	51·1	33·6	42·1	+ 1·3	36	24	4	0·35	− 0·01	36·9	+ 9·2	46	+ 12
	Cambridge	58	29	52·1	32·5	42·0	+ 0·9	28	27	3	0·25	− 0·05	33·0	+ 6·2	41	+ 8
	Felixstowe	50	34	47·5	38·4	42·8	+ 2·0	21	10	2	0·41	—	43·3†	—	54†	—
	Rothamsted	56	25	49·4	31·2	40·0	− 0·4	21	41	3	0·22	− 0·17	29·5	+ 3·9	37	+ 5
	Shoeburyness	58	32	49·4	36·0	42·5	+ 1·0	29	17	2	0·03	− 0·25	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	52	33	48·1	35·4	41·6	+ 2·4	17	26	4	0·81	+ 0·32	20·9	—	26	—
	Bawtry (Hesley Hall)	58	30	49·0	35·3	42·0	+ 1·3	20	19	4	0·52	+ 0·17	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	57	32	48·7	35·0	41·7	+ 0·9	19	28	4	0·53	+ 0·18	*	*	*	*
	Cheadle ℳ	50	31	46·5	34·7	40·4	+ 0·9	13	27	4	0·90	+ 0·41	*	*	*	*
	Birmingham (Edgbaston)	51	33	48·1	35·7	41·7	+ 1·2	17	25	3	1·34	+ 0·99	12·6	—	16	—
	Churchstoke ℳ	50	32	47·9	36·4	42·0	+ 2·1	17	16	5	1·09	+ 0·64	23·3	− 2·0	29	− 3
	Hereford ℳ	54	34	50·3	36·9	43·4	+ 1·9	31	14	4	0·93	+ 0·56	*	*	*	*
	Cirencester	55	28	49·1	32·7	40·7	+ 0·6	20	36	3	0·50	+ 0·04	19·9	− 5·4	25	− 7
	Oxford	57	32	49·4	36·1	42·6	+ 1·1	29	17	3	0·48	+ 0·14	20·3	− 4·4	25	− 6
5. ENGLAND, S.	London	59	30	52·3	34·6	43·2	+ 1·3	39	21	3	0·20	− 0·14	23·8‡	+ 6·2‡	30‡	+ 8‡
	Swarraton (Alresford) ℳ	57	24	49·4	33·2	41·1	+ 0·8	21	35	4	0·23	− 0·25	*	*	*	*
	Dungeness	52	29	50·3	37·0	43·5	+ 2·3	32	14	2	0·11	− 0·21	45·5	—	57	—
	Hastings (St. Leonards)	50	32	48·4	38·8	43·5	+ 1·9	24	9	2	0·04	− 0·40	45·3	+ 15·5	57	+ 19
	Southampton	57	28	51·4	35·5	43·2	+ 0·3	36	18	3	0·15	− 0·31	29·2	+ 1·5	36	+ 2
	Portland Bill	52	39	49·9	41·6	45·6	+ 2·1	27	1	3	0·18	—	*	*	*	*
	Shaftesbury ℳ	51	33	47·6	36·5	41·9	+ 1·5	16	22	2	0·27	− 0·22	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	49	30	46·9	36·8	41·7	+ 0·6	14	21	6	3·16	+ 1·74	*	*	*	*
	Glasgow	51	33	46·6	36·4	41·4	+ 1·5	13	22	7	1·16	+ 0·58	20·5	+ 2·2	26	+ 3
	Cally ℛ	54	31	51·6	36·9	44·0	+ 3·6	35	14	7	1·97	+ 1·15	*	*	*	*
	Douglas (Isle of Man)	50	30	47·2	38·2	42·6	+ 1·2	20	11	6	0·86	+ 0·22	18·3	− 10·0	23	− 13
7. ENGLAND N.W.	Newton Reigny	48	31	45·3	35·6	40·3	+ 1·5	9	24	4	0·78	—	21·3	—	27	—
	Stonyhurst	48	33	46·1	37·0	41·4	+ 1·3	11	19	5	0·54	− 0·23	17·6	− 5·1	22	− 7
	Blackpool ℳ	52	34	48·9	38·2	43·4	+ 2·5	26	11	6	0·43	− 0·07	17·9	− 4·8	23	− 6
	Manchester (Prestwich)	51	34	48·6	37·1	42·7	+ 2·4	25	14	4	0·76	+ 0·22	12·6	—	16	—
	Liverpool Obsy. (Bidston)	53	36	48·1	38·3	43·1	+ 1·7	23	10	5	1·18	+ 0·30	17·4	—	22	—
	Chester (Hawarden Bridge)	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Llandudno ℳ	52	37	49·6	39·8	44·6	+ 1·7	27	6	5	1·32	+ 0·87	18·3	− 5·5	23	− 7
	Holyhead	50	37	46·9	39·1	42·9	+ 0·3	18	8	6	1·06	+ 0·55	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	4	1·82	+ 1·02	*	*	*	*
	Pembroke	49	37	47·4	41·6	44·4	+ 1·7	18	1	5	1·49	+ 0·96	19·1	− 9·6	24	− 12
	Clifton	53	35	50·3	38·7	44·3	+ 2·0	30	9	3	0·38	− 0·14	*	*	*	*
	Bath	55	29	51·1	35·7	43·2	+ 1·4	35	18	2	0·24	− 0·25	23·7	—	30	—
	Arlington (N. Devon)	52	33	47·7	37·6	42·5	+ 1·7	22	12	6	1·06	+ 0·26	*	*	*	*
	Cullompton ℳ	54	29	50·3	36·5	43·2	+ 0·2	32	15	4	0·47	− 0·08	17·0	− 9·5	21	− 12
	Falmouth	52	38	49·1	41·1	45·0	+ 0·7	25	3	7	1·17	+ 0·41	27·0	− 3·0	34	− 4
	Plymouth	52	35	49·3	40·5	44·8	+ 1·1	26	4	6	0·84	+ 0·26	18·0	− 11·1	22	− 14
9 IRELAND, N.	Malin Head	49	37	46·1	38·4	42·1	0·0	16	10	3	0·47	− 0·01	*	*	*	*
	Edenfel (Omagh)	50	29	47·1	33·6	40·2	+ 0·2	14	32	4	0·47	− 0·09	*	*	*	*
	Blacksod Point	50	32	48·3	36·6	42·3	− 1·1	25	15	6	0·87	+ 0·07	*	*	*	*
	Markree Castle	51	27	49·1	33·4	41·0	− 0·6	20	33	4	0·54	− 0·21	20·4	− 2·1	26	− 3
	Armagh	51	30	48·6	34·8	41·5	+ 0·5	18	28	5	0·45	0·00	24·4	+ 2·3	31	+ 3
	Donaghadee	50	32	48·0	35·1	41·4	− 0·5	17	27	6	0·74	+ 0·29	*	*	*	*
10. IRELAND, S.	Dublin	53	34	49·6	37·8	43·5	+ 0·3	28	12	4	1·69	+ 1·24	20·4	− 5·9	26	− 7
	Birr Castle	51	28	47·9	32·7	40·1	− 1·7	17	35	6	0·63	+ 0·13	23·4	− 0·6	29	− 1
	Kilkenny	50	28	47·3	34·4	40·7	− 2·1	15	29	5	1·28	+ 0·81	*	*	*	*
	Waterford	52	31	47·7	35·0	41·2	− 1·5	16	27	6	1·87	+ 1·24	*	*	*	*
	Roche's Point	51	35	48·6	36·7	42·5	− 1·9	26	15	6	0·79	+ 0·01	*	*	*	*
	Valencia	52	33	49·3	37·6	43·3	− 2·0	28	12	6	0·59	− 0·34	24·3	− 3·9	30	− 5
	Killarney	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Foynes	51	30	49·2	34·9	41·8	− 1·6	20	28	5	0·50	− 0·10	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	40	50·9	41·7	46·2	+ 0·3	31	1	7	0·73	+ 0·21	30·7	+ 0·2	38	0
	Jersey	54	32	51·0	39·1	44·9	+ 0·5	32	8	2	0·10	− 0·42	36·2	+ 3·2	45	+ 4

Stations Marked ℳ are in connection with the Royal Meteorological Society, and those marked ℛ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

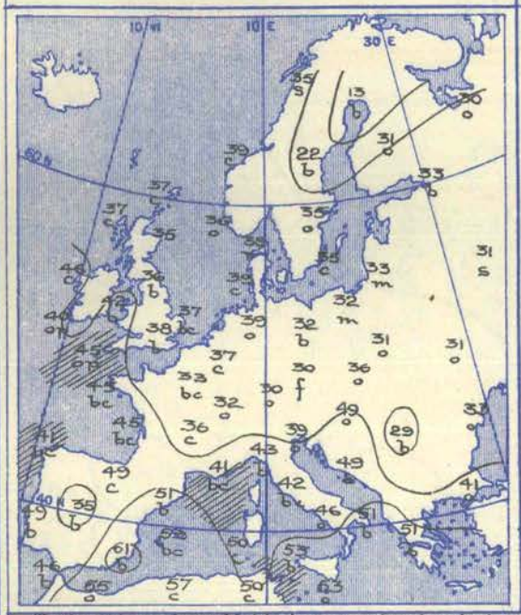
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

For additional Reports of Sunshine, see last page.

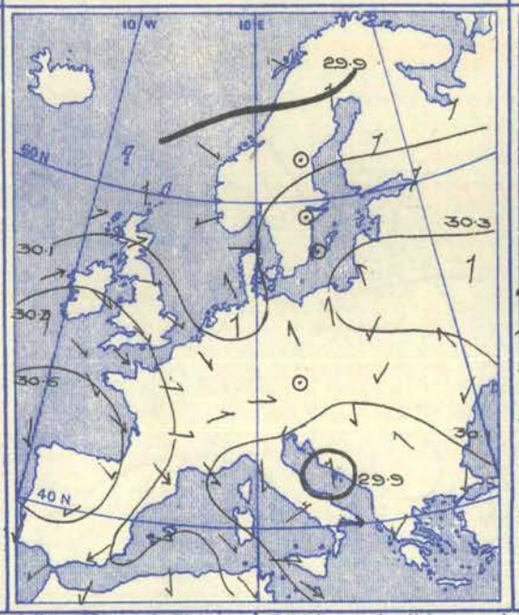
Note.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 8th March, 1903.

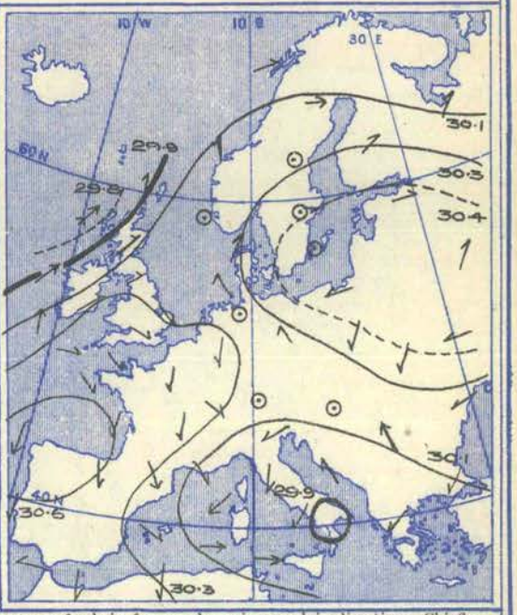
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in most regions, but cloudy or dull over Denmark, Finland, Algeria, the Adriatic, and at some Austrian and Russian stations. Rain falling at Skagen Vienna, and Pesaro, and snow at Bodö and Moscow. Rain falling later at most of our own western and northern stations—0·62 in. at Blacksod Point—and slight rain or snow over parts of northern and central Europe. Lightning observed in the north-west of Ireland.

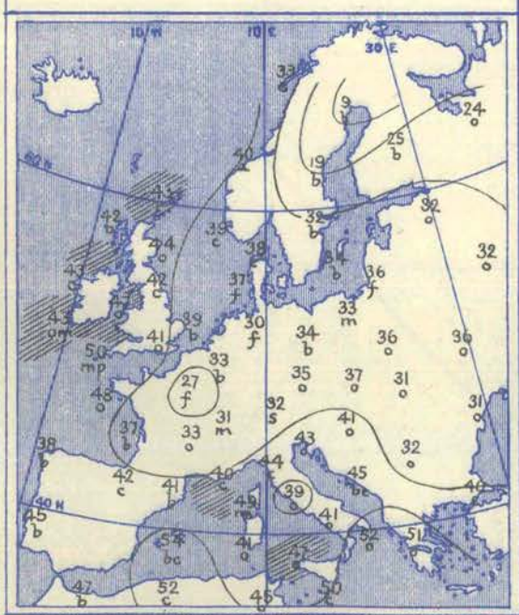
Temperature at 8 a.m. highest, 61° at Alicante, 57° at Algiers, 53° at Malta, and 51° at Brindisi and Patras. Lowest, 13° at Haparanda, 26° at Kharkov, 29° at Hermanstadt, 30° at Archangel, 32° at Berlin and Limoges, and 35° at Madrid, Parsonstown, and Aberdeen. Touching or just exceeding 50° at some of our western and southern stations during day, and rising to 60° or above at various stations on the shores of the Mediterranean. Highest readings of all 68° at San Fernando and Nemours. Remaining below 50° over the greater part of France and throughout central Europe, and only rising to 51° and 52° respectively at Rome and Naples.

Wind in morning light to moderate or fresh in force and varying much in direction. Chiefly North-Westerly over our Islands and France, South-Westerly over western Germany, Southerly in Denmark, and Easterly at Skudesnaes. Irregularly cyclonic over Italy and its neighbourhood and anticyclonic over Russia. Little change as a whole later, but wind backing to the Southward and increasing greatly in force along our western coasts later, and to the South-Westward over the United Kingdom generally.

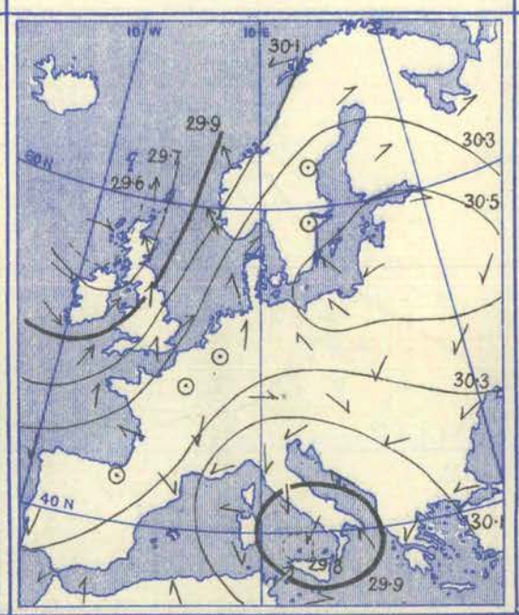
Barometer at 8 a.m. ranging from 30·5 ins. and upwards in an anticyclone extending from the Atlantic over the Bay of Biscay and the north of Spain, and above 30·3 ins. in another system extending from central Russia to east Prussia, to less than 29·9 ins. in a depression (1) over Bosnia, Dalmatia, and the adjacent portion of the Adriatic, and (2) in the extreme north of Scandinavia. Below 30·1 ins. in a shallow system of a V-shaped character over the North Sea. Russian anticyclone increasing in energy later, and barometer rising over the Continent generally. Falling briskly on our own western coasts, and another disturbance advancing from the Atlantic.

Monday, 9th March, 1903.

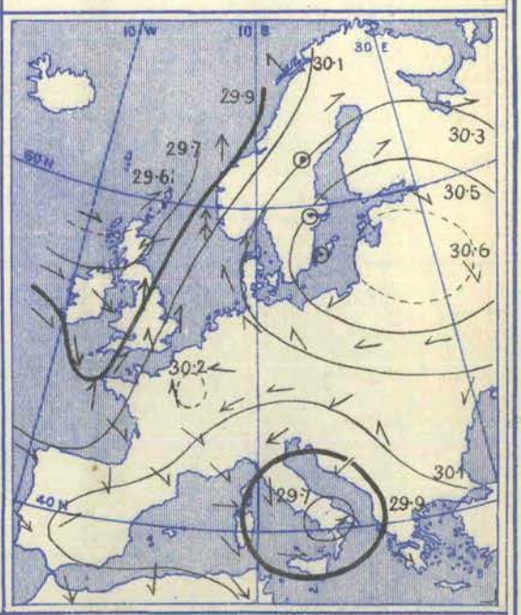
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over Sweden, the Netherlands, Spain, and at several French stations, but cloudy or dull elsewhere. Rain falling over our western districts and in the Shetlands, and snow at Hangö. Fog prevailing in north Germany and at Paris. Rain experienced later throughout the United Kingdom and the north-west of France, and also over Tunis, Greece, and southern Italy—as much as 0·8 in. at Patras, and 0·6 in. at Pembroke.

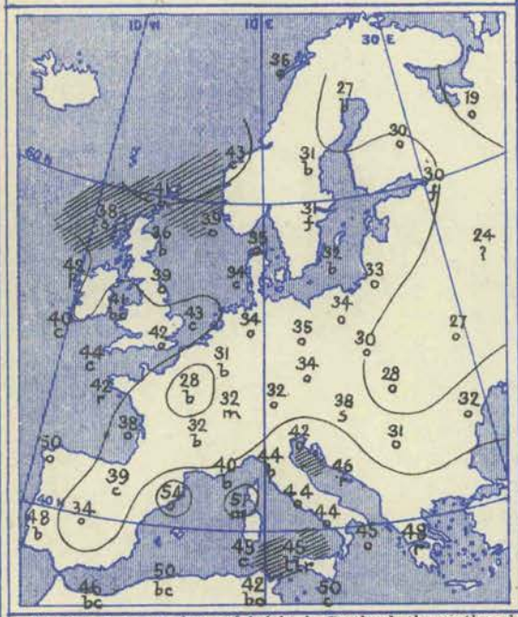
Temperature risen over our Islands, fallen in most parts of the Continent. Readings at 8 a.m. highest, 54° at Palma, 52° at Brindisi, 51° at Patras, and 50° at Malta and Scilly. Lowest, 9° at Haparanda, 24° at Archangel, 27° at Paris, 32° at Munich and Hermanstadt, 38° at Barcelona, and 39° at Rome. Maxima during day, 51° at Leith and Scilly, a few degrees higher on the west and south coast of France and at most Italian stations, 61° at Patras, Lisbon, and Barcelona, and 66° in western Algeria. Thermometer remaining below 40° in some parts of central Europe.

Wind in morning West or West-North-West on our extreme west and north-west coasts, Southerly over our Islands as a whole, as well as over Denmark and Norway. Moderate or light generally, but strong at some of our western and northern stations. Cyclonic and light over Italy and its neighbourhood, but South-South-Westerly current at Palermo strong. Light and anticyclonic over Russia and the Baltic. Wind veering to the Northward on our south-west and west coasts later, and blowing strongly and increasing to a gale from the Southward on the south-west coast of Norway. No important change elsewhere.

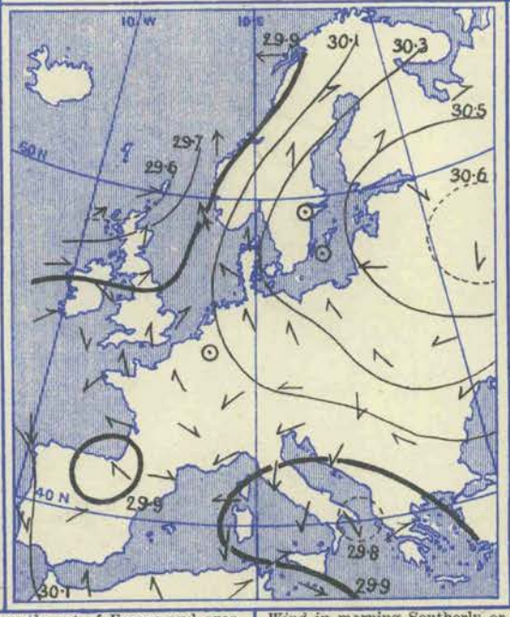
Barometer fallen over Italy, the Spanish Peninsula, France, and our Islands; risen elsewhere. Readings at 8 a.m. highest, 30·4 ins. to 30·5 ins. and upwards over the greater part of Russia. Lowest, 29·6 ins. and less in a V-shaped disturbance over our western districts. Below 29·9 ins. in a depression having its centre over the Tyrhennian Sea. Both low-pressure systems moving in an easterly direction later, but fresh systems developing near the Scilly Isles and over Spain and the extreme south-west of France. Barometer rising again in Ireland.

Tuesday, 10th March, 1903.

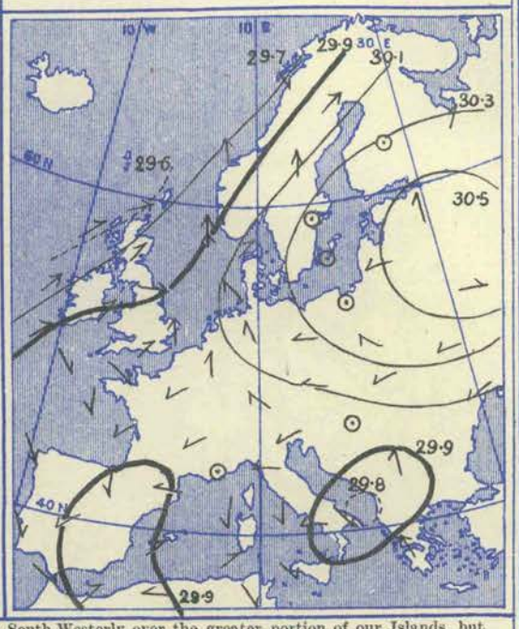
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in Scotland, the south and south-east of France and over Algeria, but cloudy or dull in most other localities. Showery in Ireland and rainy in several parts of England, as well as at Lésina and Patras. Thunder and lightning prevailing at Palermo, and snow in parts of Germany and Austria. Slight rain falling later in most parts of the United Kingdom, and as much as 0·5 in. at Stornoway. Rain also in various parts of southern Europe—as much as 0·6 in. at Cette, 0·8 in. at Cagliari, and 1·0 in. at Bilbao.

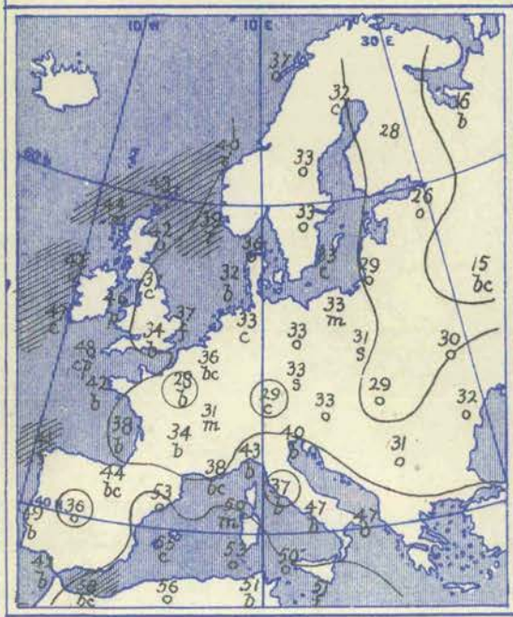
Temperature fallen at most of our own stations, changed irregularly elsewhere. Readings at 8 a.m. highest, 54° at Barcelona, 50° at Coruuna, Algiers, and Malta. Lowest, 19° at Archangel, 22° at Kharkov, 28° at Paris, 33° at Parsonstown, 34° at Madrid. Rising later to 50° at Scilly, to 55° or upwards at many French, Spanish, and Italian stations, to 61° at Palma, and to 68° at Nemours. Remaining below 40° in many parts of central Europe, and only touching 32° at Lemberg.

Wind in morning Southerly or South-Westerly over the greater portion of our Islands, but Northerly on our extreme south-west coasts and the west of Spain; drawing into South-West at Madrid, and into South-East or East in the north and west of France. An irregular cyclonic circulation shown around Italy, and an anticyclonic movement over Russia. Strong gale from South-South-East prevailing in the south-west of Norway. Wind backing to South-West later on our South-West coasts, but very little change over our area as a whole. Southerly gale continuing at Skudesnaes, and moderate gale from South-South-East springing up at Patras.

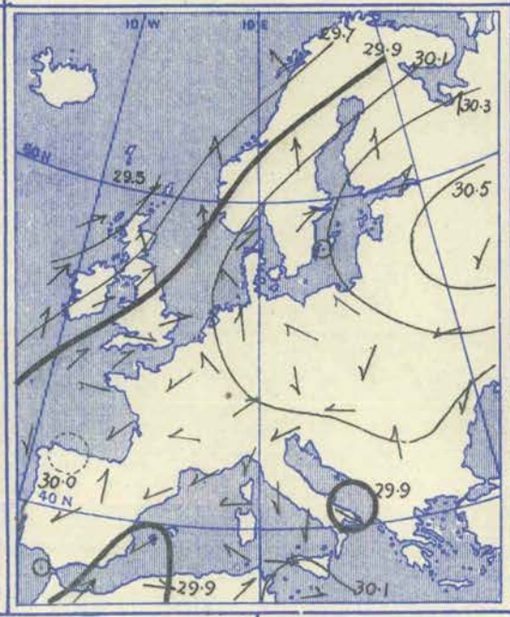
Barometer at 8 a.m. ranging from 30·5 ins. to 30·6 ins. and upwards in an anticyclone over Russia, to 29·9 ins. and less in a depression over the south-eastern corner of the Bay of Biscay and the adjoining portions of France and Spain, to 29·8 ins. and less in another system over southern Italy and the Adriatic, and to below 29·6 ins. in a third disturbance to the northward of Scotland. No great or general change during day, but depression over the Bay of Biscay moving southwards. A fresh baric fall commencing in Ireland.

Wednesday, 11th March, 1903.

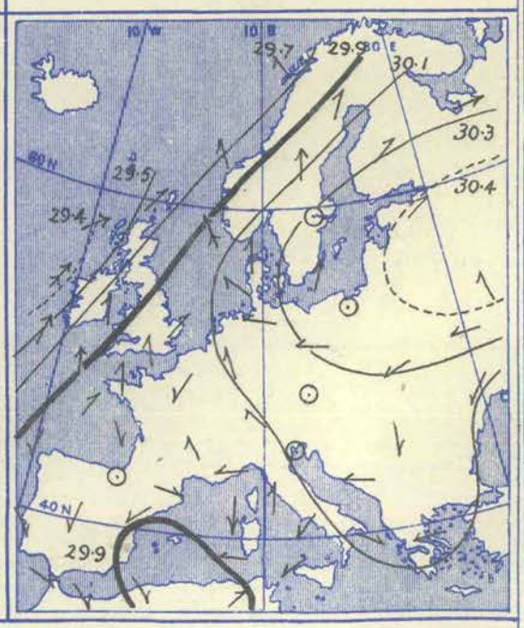
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull in most regions, with rain or passing showers at a few of our own western stations in the south-west of Norway and at Oran, and snow in several parts of central Europe. Fine and bright in many British districts, over France and Italy. Foggy at Corunna and Malta. Becoming rainy during day at a few Italian stations, and heavy snow falling at Nicolaïeff and Odessa (0·6 in. and 1·2 ins. respectively). Rain continuing over western Algeria.

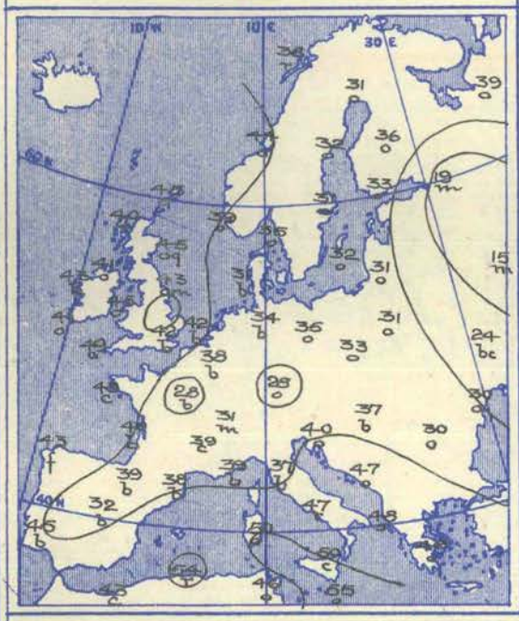
Temperature risen in the west and north of our Islands, fallen in the east and over Russia, changed irregularly elsewhere. Readings at 8 a.m. highest, 59° at Oran, 55° at Barcelona, 53° at Palermo, and 51° at Malta. Lowest, 15° at Moscow, 16° at Archangel, 22° at Kharkov, 28° at Paris, 31° at Limoges, 35° at Florence, 36° at Madrid, 37° at Rome, and 40° at Tunis. Rising subsequently to above 50° over France, Italy, Spain, and at several of our own stations, to 66° at Nemours, and to 70° at La Calle. Not exceeding 48° at Aumale (inland Algeria).

Wind light and anticyclonic over Russia and the central countries, and light to fresh or strong from the Southward or South-Westward over our Islands and Scandinavia, with a gale at Skudesnaes. Very variable over France and the Mediterranean. A cyclonic circulation setting in later over the western parts of the Mediterranean, and a strong Southerly gale blowing on the north-west coast of Ireland. South-South-Easterly gale at Skudesnaes continuing.

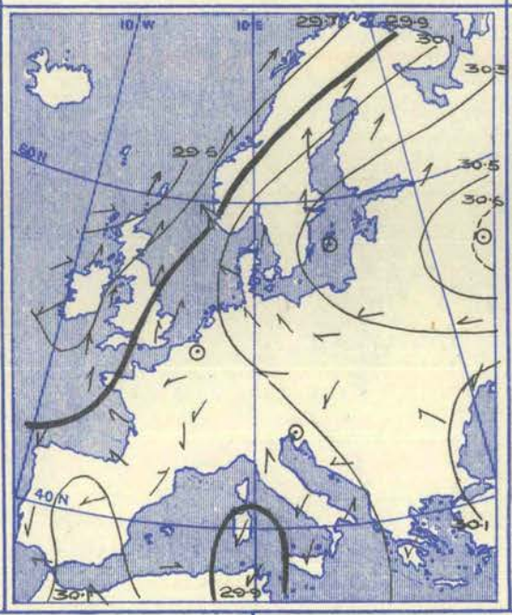
Barometer fallen generally, but risen over Greece, Italy, and France. Readings at 8 a.m. highest, 30·4 ins. to 30·5 ins. and upwards over central and eastern Russia. Lowest, about 29·4 ins. in a depression off the north-west of Scotland; about 29·9 ins. in two other low-pressure systems shown in the southern regions. A fresh baric fall taking place on our own west coasts later, and gradients becoming rather steep. Russian anticyclone decreasing somewhat in height, and a depression which had existed near Brindisi disappearing.

Thursday, 12th March, 1903.

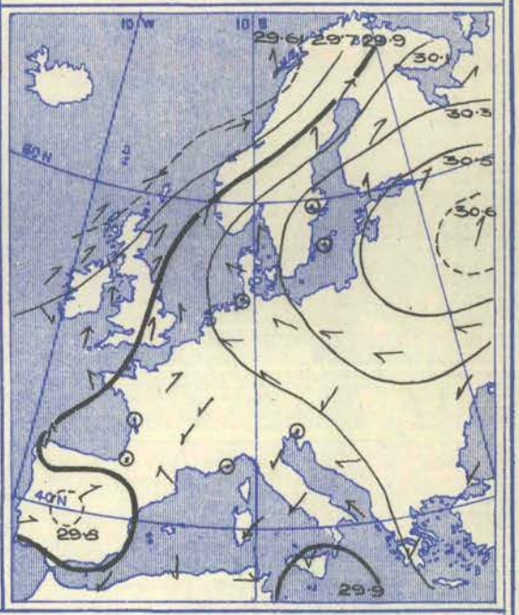
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull generally, with rain at Dongahadee, Bodö, Rome, and Algiers, and snow at Vienna. Fog still prevailing at Corunna. Fine in France, most parts of Spain and Portugal, western Germany, and the major portion of England. Slight rain later over our western and northern districts, and heavier falls over Italy, the Adriatic, and Greece—as much as 1·1 ins. at Brindisi. A considerable fall of snow at Vienna.

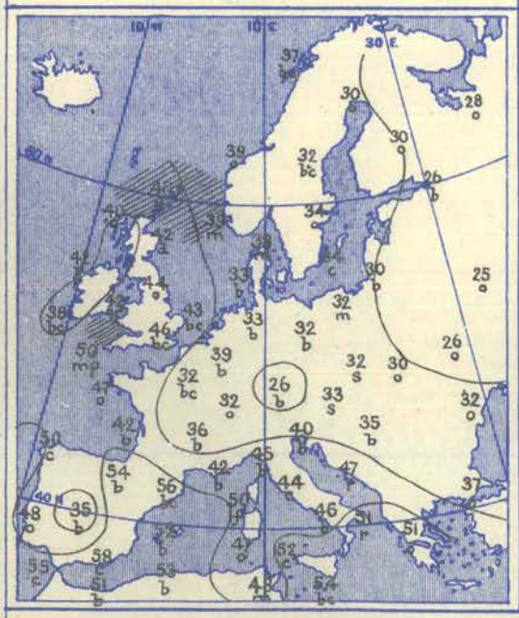
Temperature changed irregularly. Readings at 8 a.m. ranging from 55° at Malta and Barcelona, and 54° at Algiers, to below 40° in most parts of France and central Europe, to 32° at Madrid, 28° at Paris and Munich, 22° at Kharkov, and 15° at Moscow. Reading at Nemours as low as 43°, and that at Biarritz, Nice, and Archangel 39°. Rising later to 55° in London, 60° or rather higher in some parts of France, 66° at San Fernando and Palermo, and to 73° at La Calle. Only reaching 49° at Pesaro, and 51° at Rome.

Wind continuing light and anticyclonic over central Europe and Russia; Southerly or South-Westerly over Scandinavia, Denmark, and the greater part of the United Kingdom, but Northerly in the south of Ireland. Strong in force over the Irish Sea, and blowing a gale at Skudesnaes and Hernösand. Light and irregularly cyclonic over the Mediterranean. No very material change later over our area as a whole, but gale subsiding at Hernösand.

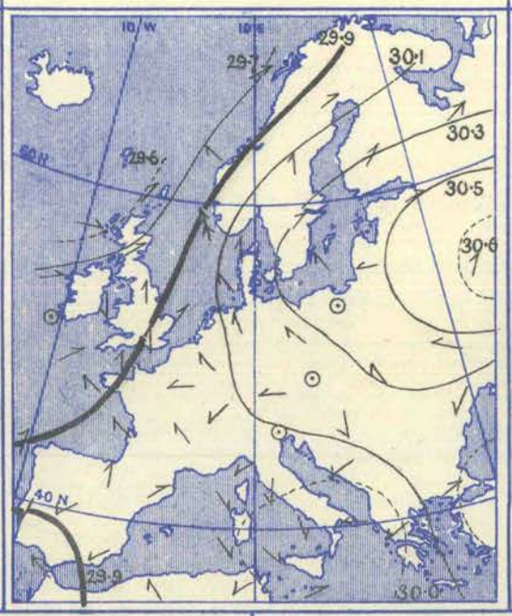
Barometer at 8 a.m. ranging from above 30·5 ins. in an anticyclone over central Russia, to 29·9 ins. and less in a shallow depression over Sardinia, Tunis, and eastern Algeria, to below 29·7 ins. in a V-shaped secondary off our south-west coasts, and to about 29·4 ins. in a large but not deep disturbance off the north-west of Scotland. Barometer rising in most regions during day, and secondary depression off our south-west coasts partially dispersing. A brisk fall of barometer taking place over central Spain, and a cyclonic system forming in that region.

Friday, 13th March, 1903.

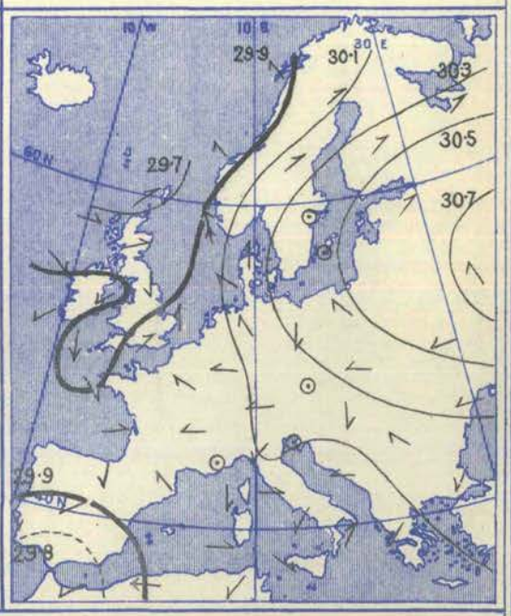
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull generally, but fair in most parts of Ireland, England, Germany, France, Spain, and Italy. Rainy in Wales and the east of Scotland, and also at Athens, Brindisi, and Lesina. Snow falling in some parts of Austria. Rain later in the north and west of our Islands and over Brittany (0·5 in. at Pembroke, and 0·6 in. at Ushant), and slight amounts at a few stations on the shores of the Mediterranean

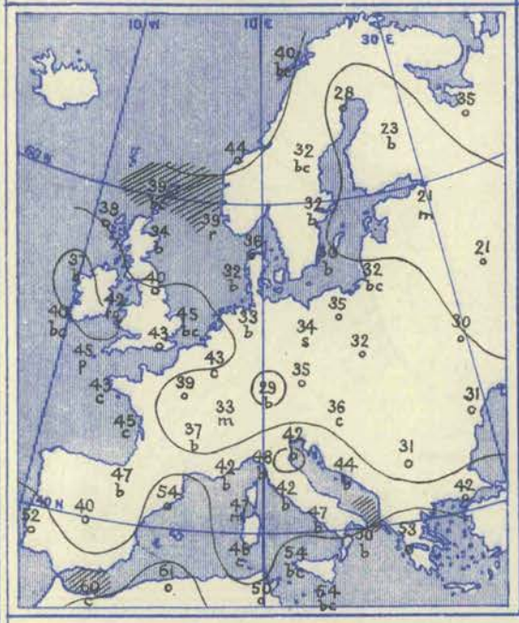
Temperature changed irregularly. Readings at 8 a.m. highest, 58° at Alicante, 54° at La Calle and Malta, 51° at Brindisi, and 50° at Scilly. Lowest, 25° at Moscow, 26° at St. Petersburg, Kiev, and Munich, 32° at Paris, 34° at Parsonstown, 35° at Madrid, and 39° at Florence. No higher than 45° at Sfax, and 39° at Aumale. Rising subsequently to 57° at Oxford, 59° in London, to above 60° in most parts of southern Europe, highest reading of all being 68° at Bilbao and Croisette. Maxima below 40° in some parts of central Europe—as low as 36° at Vienna.

Wind Southerly or South-Westerly over north-western Europe as a whole, and strong to a gale in the south-west of Norway. Light and mainly Easterly over central Europe and France. Light and cyclonic over southern Europe and the Mediterranean. Veering to the Northward later on our west and south-west coasts. No great change as a whole elsewhere, but wind increasing to a strong breeze from East at Algiers.

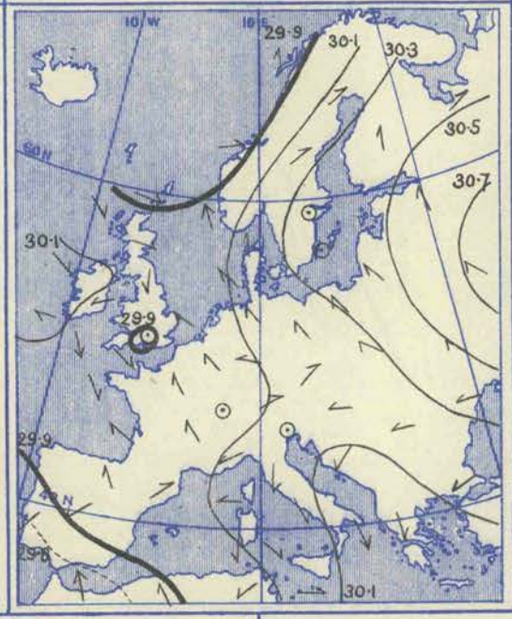
Barometer changing little and irregularly. Readings at 8 a.m. ranging from above 30·6 ins. in an anticyclone over central Russia, to 30·0 ins. and less in a shallow area over Italy and its neighbourhood, 29·9 ins. and less over the south of Spain, to below 29·8 ins. in a secondary depression off our south-west coasts, and to below 29·6 ins. in a large but not deep system off the north-west of Scotland. Last-mentioned disturbance moving slowly north-eastwards later, and the secondary travelling slightly eastwards and partially dispersing. Pressure decreasing over the south of Spain and the adjacent portion of Africa.

Saturday, 14th March, 1903.

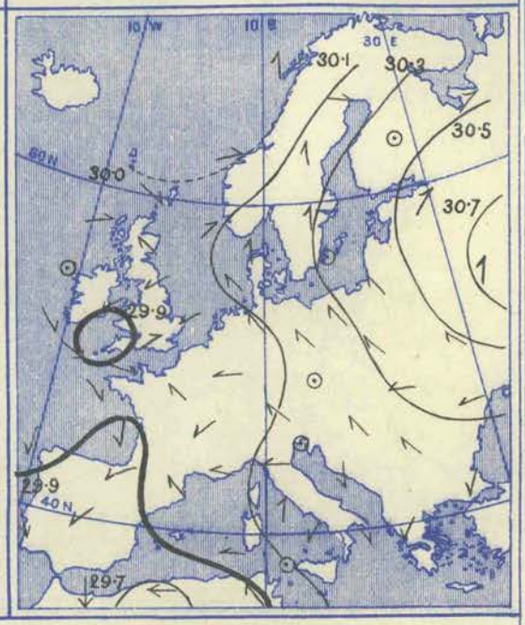
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in Ireland, Scotland, Sweden, Finland, and most parts of southern Europe; cloudy or dull elsewhere, with rain over Wales and the western counties of England, as well as at Nemours and Skudesnaes. Rain becoming general over England later, but amounts not large. Nearly an inch falling in western Algeria, nearly half an inch at Constantinople, and a considerable quantity of snow at Breslau.

Temperature fallen at most of our own stations, risen on the southern shores of the Mediterranean, changed irregularly elsewhere. Readings at 8 a.m. highest, 61° at Algiers, 54° at Barcelona, Palermo, and Malta, and 53° at Patras. Lowest, (1) 21° at Moscow and St. Petersburg, 29° at Munich, 31° at Karlstad and Breslau, 36° at Pesaro, and 37° at Florence; (2) 30° at Parsonstown, 34° at Wick and Aberdeen. Rising during day to 56° in London, 60° or a little higher in the west and south of France, and in many parts of the Mediterranean, and to 73° at La Calle. Not exceeding 41° at Besançon, and 42° at Lyons.

Wind at 8 a.m. varying greatly in direction, but generally of little strength. Westerly breezes prevailing in Scotland, Southerly or South-Westerly in Scandinavia, and variable or Easterly winds in most parts of central and southern Europe. A cyclonic circulation shown over England and the Channel, the Northerly current on our west coasts blowing freshly. Very little change later except over Algeria, where a strong cyclonic circulation was setting in.

Barometer at 8 a.m. highest, 30·7 ins. and upwards in a large anticyclone having its centre over central Russia, and lowest, 29·8 ins. and less off the south of Spain and its neighbourhood. As low as 29·9 ins. in a large depression off the west of Norway, and also in a small system over the south of England. Northern disturbance travelling away northwards later, and that over England moving westwards. A well-defined low-pressure system appearing over Algeria.

IV.—GENERAL NOTES, etc.

The changes during this period, both of pressure and temperature, have been less sudden and striking than of late. At the commencement of the week the barometer was highest in an anticyclone stretching from the Atlantic to the west of France, and relatively high in another over central Russia, while shallow low-pressure systems were found between our Islands and Scandinavia, and also over the Mediterranean. The Atlantic anticyclone soon began to disperse, while that over Russia increased steadily in intensity, and soon became the dominant, if not the only high-pressure system within our area. Depressions continued to appear over various parts of the Mediterranean and southern Europe, and over our own western and southern districts, but they were far from deep as a rule, although one which skirted our west coasts on Wednesday, brought fresh or strong Southerly gales to that region. The general direction of the wind over the northern countries was between South and West, and that in the south from some North-Easterly or Easterly point, but on some occasions both over our Islands and the Mediterranean, complete or nearly complete cyclonic circulations were observed. Temperature was frequently low over the central and southern regions, but was chiefly above the normal over our Islands and Norway. Rain was experienced at times on the various shores of the Mediterranean, and more often over the United Kingdom—especially in the north-west and west. Over Russia and its immediate neighbourhood the weather was almost continuously dry, but snow fell from time to time in parts of Austria and Germany.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶ = a heavy gale; ⟶ = a gale; → = a fresh to strong breeze; → = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from Observations made at 8 a.m. in the British Islands, Belgium, Holland and Spain; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands, Belgium and Spain; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 56.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	22·2	- 0·4	28	- 1	SHEFFIELD	14·2	—	18	—	WESTBOURNE	29·9†	- 0·5	37†	- 1
STRATHPEFFER SPA	26·1	+ 6·9	33	+ 9	WORKSOP	14·7	- 7·2	18	- 9	VENTNOR HOSPITAL	32·1	+ 0·6	40	+ 1
EDINBURGH	21·2	+ 0·8	27	+ 1	THURCASTON	19·1	- 2·6	24	- 3	BOURNEMOUTH	25·0	—	31	—
COCKLE PARK	26·0	—	33	—	TUNBRIDGE WELLS	37·0	—	46	—	MARLBOROUGH	21·0	- 2·0	26	- 3
NEWCASTLE-ON-TYNE	19·3	—	24	—	MARGATE	38·8	+ 12·2	48	+ 15	SOUTHPORT	17·7	—	22	—
YORK	18·4	- 4·1	23	- 5	BROADSTAIRS	44·1	—	55	—	RHYL	—	—	—	—
CROMER	34·5	—	43	—	RAMSGATE	—	—	—	—	ABERDOVEY	29·3†	—	37†	—
LOWESTOFT	46·1	—	50	—	EASTBOURNE	40·9	+ 11·5	51	+ 14	TENBY	10·2	- 20·4	13	- 26
HOLLESLEY BAY	37·3	—	47	—	BRIGHTON	34·8	+ 5·8	43	+ 7	TORQUAY	23·9	- 6·3	30	- 8
DUNMOW	29·4	—	37	—	WORTHING	32·3	—	40	—	NEWQUAY	20·6	- 9·1	26	- 11
					BOGNOR	36·7†	—	46†	—	GUERNSEY	37·3†	- 5·1	46†	+ 6
					WATERGATE PARK	30·6	—	38	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 11.] *Third Series.* WEEK ENDING SATURDAY, MARCH 21ST, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 62.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	58	25	45·3	34·5	39·8	1 above	9	− 2	28	− 4	103	+ 18	322	− 64
	1. SCOTLAND, EAST	56	26	46·7	35·0	40·7	1 above	13	− 3	27	− 7	141	+ 30	350	− 66
	2. ENGLAND, N.E.	57	32	50·8	37·7	44·1	3 above	33	+15	12	−17	214	+ 94	241	−131
	3. ENGLAND, EAST	60	28	52·4	40·3	46·2	5 above	37	+13	5	−26	254	+109	230	−181
	4. MIDLAND COUNTIES	58	32	51·3	38·8	44·9	4 above	34	+ 9	9	−22	238	+ 75	248*	−165
	5. ENGLAND, SOUTH	58	31	50·8	41·5	46·0	4 above	30	+ 5	1	−23	264	+ 85	143	−173
Principal Grazing Districts.	6. SCOTLAND, WEST	54	33	47·8	39·4	43·5	2 above	21	+ 5	7	−18	172	+ 47	206	−108
	7. ENGLAND, N.W.	58	33	49·5	40·2	44·7	3 above	26	+ 8	5	−19	225*	+ 92	186	−119
	8. ENGLAND, S.W.	58	35	51·4	41·8	46·5	3 above	32	+ 7	1	−19	292	+ 88	109	−134
	9. IRELAND, NORTH	55	28	48·8	37·8	43·1	1 above	25	+ 3	12	−10	200	+ 25	218	− 52
	10. IRELAND, SOUTH	58	29	51·0	40·0	45·3	2 above	32	+ 4	6	− 9	308*	+ 59	126*	− 74
	— CHANNEL ISLANDS	60	34	52·6	42·3	47·3	2 above	37	+ 7	0	− 8	381	+101	37	− 65

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 62.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	29	20 more	62	+11	21·6	+ 9·7	15	− 7	18	− 8	94	− 49	14	− 7
	1. SCOTLAND, EAST	6	16	11 more	49	+ 7	11·0	+ 4·8	17	− 8	21	− 9	129	− 48	18	− 6
	2. ENGLAND, N.E.	3	6	2 more	37	− 2	4·3	− 0·2	20	− 9	24	−11	157	− 30	22	− 4
	3. ENGLAND, EAST	2	2	1 less	33	− 8	3·2	− 1·1	25	− 2	30	− 3	201	− 1	27	0
	4. MIDLAND COUNTIES	4	8	4 more	38	0	6·0	+ 0·7	22	− 2	26	− 2	158	− 13	21	− 2
	5. ENGLAND, SOUTH	3	5	1 more	43	+ 4	5·6	− 0·1	29	0	35	0	187	− 8	25	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	27	19 more	62	+16	19·4	+ 7·9	12	−13	15	−16	111	− 54	15	− 8
	7. ENGLAND, N.W.	5	13	8 more	51	+ 9	10·1	+ 3·4	13	−13	16	−16	154	− 15	21	− 2
	8. ENGLAND, S.W.	5	9	4 more	52	+ 8	10·7	+ 2·1	24	− 7	29	− 9	167	− 48	22	− 6
	9. IRELAND, NORTH	7	19	13 more	60	+10	11·8	+ 4·6	18	− 6	22	− 8	146	− 29	20	− 4
	10. IRELAND, SOUTH	6	17	11 more	57	+10	12·7	+ 3·6	15	−14	18	−17	156	− 47	21	− 6
	— CHANNEL ISLANDS	5	6	1 more	54	+ 6	7·8	+ 0·7	34	0	41	0	217	− 29	29	− 4

* These values have been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded.

General Remarks.

Weather during this period was very unsettled and rainy over the greater part of the Kingdom, but over the east and south of England rain far less frequent and heavy, and several very fine intervals were experienced. Considerable falls of wet snow occurred on the night of Tuesday-Wednesday at some stations in the north of England. Lightning was observed on several occasions at the north-western stations, and on Thursday thunder was heard at Fort William.

Temperature was above the mean, the excess ranging from 1° in Scotland N. and E. and Ireland N., to as much as 4° in England S. and the Midland Counties, and to 5° in England E. The highest of the maxima were recorded on Saturday, when the thermometer rose to 60° in England E. and the Channel Islands, and to 58° in several other districts; in Ireland N. and Scotland W., however, the highest values were 55° and 54° respectively. The lowest of the minima were registered very early in the period, and ranged from 25° in Scotland N., and 26° in Scotland E., to 34° in the Channel Islands, and to 35° in England S.W.

Rainfall was greatly in excess of the mean in most districts, but only slightly so in the Channel Islands and over the south of England. Over Scotland and in Ireland N. the aggregate fall was more than three times the normal, and in Ireland S. and England N.W. more than twice as great. In England E. there was a deficit of 0·1 inch.

Bright Sunshine just equalled the mean amount in England S. and the Channel Islands, but was deficient in all other parts of the Kingdom. The percentage of the possible duration ranged from 41 in the Channel Islands, 35 in England S., and 30 in England E., to 18 in Scotland N. and Ireland S., 16 in England N.W., and to 15 in Scotland W.

Barometer and Wind.—Cyclonic disturbances having their centres mostly outside our area again travelled north-eastwards over our more western and northern coasts, extending their influence at times in the form of secondaries to our southern and eastern counties. This was especially the case on Tuesday night, when a small secondary moved quickly east-north-eastwards directly over our southern districts to the North Sea. The prevailing Southerly to Westerly winds were almost continuously fresh or strong over the whole Kingdom; in the west and north-west moderate or fresh gales were frequent, and that force was reached occasionally in the south and east also.

207 | 90 Wy & S. Ltd.
319 | 70 12 | 02

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	46	34	43·6	36·9	40·2	+ 1·8	4	19	7	1·93	+ 1·29	*	*	*	*
	Stornoway	50	33	46·0	35·0	40·3	+ 0·7	11	26	6	2·08	+ 1·31	23·0	- 1·3	28	- 2
	Wick	50	30	45·9	34·4	40·0	+ 0·6	11	28	6	0·52	+ 0·08	*	*	*	*
	Lairg Ⓢ	49	25	44·4	30·9	37·5	+ 0·2	7	39	6	1·00	+ 0·30	*	*	*	*
	Glencarron Ⓢ	55	29	44·9	33·6	39·1	+ 0·8	8	30	7	3·91	+ 2·41	*	*	*	*
	Fort Augustus Ⓢ	52	27	45·4	34·0	39·5	- 0·3	10	29	7	3·96	+ 3·27	6·7	- 11·3	8	- 14
	Fort William	58	33	47·2	36·9	41·9	+ 1·5	15	20	7	6·91	+ 5·60	5·1	- 17·3	6	- 21
1. SCOTLAND, E.	Nairn	55	26	47·6	32·9	40·0	+ 0·3	16	34	6	1·13	+ 0·76	*	*	*	*
	Aberdeen	53	31	47·4	36·0	41·5	+ 1·2	15	23	7	0·77	+ 0·27	25·4	- 2·4	31	- 3
	Braemar Ⓢ	50	31	41·5	33·3	37·3	+ 1·0	0	33	7	3·01	+ 2·46	*	*	*	*
	Ochtertyre Ⓢ	51	27	46·7	34·7	40·5	+ 0·4	13	27	7	3·28	+ 2·68	*	*	*	*
	Leith	56	34	50·3	37·4	43·7	+ 2·3	31	13	7	0·89	+ 0·59	*	*	*	*
	Marchmont Ⓢ	51	30	46·6	35·6	40·9	+ 1·5	13	24	4	0·58	+ 0·04	13·0	- 11·3	16	- 14
2. ENGLAND, N.E.	Alnwick Castle	57	34	50·5	37·9	44·0	+ 4·0	31	11	5	0·56	+ 0·03	*	*	*	*
	Durham	53	32	48·5	36·0	42·1	+ 2·0	26	17	4	0·28	- 0·16	16·2	- 9·8	20	- 12
	Shields	56	33	50·9	38·4	44·5	+ 3·8	33	10	4	0·54	+ 0·16	*	*	*	*
	Scarborough Ⓜ	56	33	51·7	36·6	43·9	+ 2·7	36	15	2	0·57	+ 0·17	19·7	—	24	—
	Spurn Head	55	35	51·3	39·0	45·0	+ 4·1	34	8	2	0·60	+ 0·35	*	*	*	*
	Fulbeck (Lincolnshire)	55	33	51·9	38·1	44·8	+ 3·9	36	11	2	0·86	+ 0·56	27·7	—	33	—
3. ENGLAND, E.	Hillington Ⓜ	58	33	51·8	41·1	46·3	+ 4·9	34	3	2	0·42	+ 0·06	21·0	- 6·3	25	- 8
	Yarmouth	57	35	51·9	40·1	45·8	+ 5·3	35	5	2	0·18	- 0·20	*	*	*	*
	Geldeston	58	33	53·3	39·7	46·3	+ 4·8	40	6	2	0·14	- 0·21	19·0	- 10·7	23	- 13
	Cambridge	60	32	54·8	38·6	46·5	+ 4·7	46	10	1	0·13	- 0·18	33·2	+ 4·4	40	+ 5
	Felixstowe	57	37	51·5	41·9	46·6	+ 5·0	33	0	1	0·13	—	31·6†	—	38†	—
	Rothamsted	55	28	51·8	38·3	44·9	+ 3·8	36	10	3	0·42	+ 0·05	30·6	+ 2·9	37	+ 4
	Shoeburyness	55	38	51·9	42·4	47·0	+ 5·1	35	0	1	0·04	- 0·23	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	56	32	49·3	37·5	43·2	+ 3·4	27	13	6	1·28	+ 0·80	13·3	—	16	—
	Bawtry (Hesley Hall)	58	33	52·4	38·6	45·3	+ 3·9	37	10	2	0·61	+ 0·26	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	56	34	52·3	38·4	45·1	+ 3·6	37	10	2	0·32	- 0·01	*	*	*	*
	Cheadle Ⓜ	56	33	49·4	37·7	43·4	+ 3·2	28	12	4	1·12	+ 0·65	*	*	*	*
	Birmingham (Edgbaston)	58	34	51·4	38·6	44·8	+ 3·7	34	10	2	1·01	+ 0·66	16·4	—	20	—
	Churchstoke Ⓜ	58	33	50·9	39·6	45·1	+ 4·6	32	7	5	0·99	+ 0·55	30·8	+ 3·5	37	+ 4
	Hereford Ⓜ	57	36	51·8	40·0	45·7	+ 3·5	34	6	6	0·96	+ 0·62	*	*	*	*
	Cirencester	57	32	52·2	38·2	45·0	+ 4·2	37	11	5	0·72	+ 0·30	24·9	- 2·4	30	- 3
	Oxford	55	35	51·9	40·6	46·1	+ 3·9	35	4	1	0·25	- 0·08	26·8	- 0·2	32	0
5. ENGLAND, S.	London	58	34	53·3	41·4	47·2	+ 4·4	39	2	2	0·16	- 0·16	25·4‡	+ 5·6‡	31‡	+ 7‡
	Swarraton (Alresford) Ⓜ	55	31	50·7	38·8	44·6	+ 3·6	32	9	4	0·85	+ 0·40	*	*	*	*
	Dungeness	54	40	51·0	43·4	47·1	+ 5·4	36	0	3	0·24	- 0·09	24·1	—	29	—
	Hastings (St. Leonards)	52	39	49·4	43·0	46·1	+ 3·9	29	0	4	0·42	- 0·01	26·2	- 6·0	32	- 7
	Southampton	55	37	52·3	42·7	47·4	+ 4·0	38	0	4	0·87	+ 0·43	30·4	+ 0·7	37	+ 1
	Portland Bill	52	41	50·0	42·9	46·4	+ 2·5	31	0	3	0·38	—	*	*	*	*
	Shaftesbury Ⓜ	51	36	49·2	38·0	43·4	+ 2·4	27	11	4	0·30	- 0·16	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	54	33	47·4	37·4	42·3	+ 0·8	21	13	7	4·80	+ 3·47	*	*	*	*
	Glasgow	52	33	46·4	38·6	42·4	+ 2·0	17	10	7	2·49	+ 1·95	8·4	- 11·8	10	- 14
	Cally Ⓢ	52	37	49·6	39·7	44·5	+ 3·6	27	6	6	1·86	+ 1·12	*	*	*	*
	Douglas (Isle of Man)	52	36	47·6	41·7	44·6	+ 3·0	19	1	6	1·62	+ 1·02	16·0	- 15·0	19	- 18
7. ENGLAND N.W.	Newton Reigny	52	33	47·4	37·9	42·5	+ 3·1	21	11	6	2·59	—	11·3	—	14	—
	Stonyhurst	51	34	47·6	40·2	43·7	+ 3·2	19	5	6	1·83	+ 1·09	9·5	- 15·3	11	- 18
	Blackpool Ⓜ	54	34	49·5	40·2	44·7	+ 3·5	26	5	7	1·35	+ 0·90	11·6	- 13·1	14	- 16
	Manchester (Prestwich)	53	33	49·0	40·5	44·6	+ 3·7	25	4	5	1·00	+ 0·45	8·1	—	10	—
	Liverpool Obsy. (Bidston)	56	33	50·9	40·1	45·3	+ 3·2	31	5	4	0·89	+ 0·52	20·1	—	24	—
	Chester (Hawarden Bridge)	58	36	53·0	41·0	46·8	+ 4·2	38	3	3	0·68	—	*	*	*	*
	Llandudno Ⓜ	54	33	50·5	41·8	46·0	+ 2·8	29	1	6	0·98	+ 0·56	13·8	- 11·7	17	- 14
	Holyhead	51	34	48·3	40·1	44·1	+ 1·1	23	5	5	1·22	+ 0·73	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	51	38	49·1	42·3	45·6	+ 2·6	25	0	5	0·96	+ 0·46	20·9	- 10·2	25	- 12
	Clifton	56	39	52·1	41·6	46·7	+ 3·9	35	1	5	0·96	+ 0·46	*	*	*	*
	Bath	56	37	52·6	41·9	47·1	+ 4·9	36	0	4	0·49	+ 0·04	25·4	—	31	—
	Arlington (N. Devon)	54	35	49·7	39·1	44·2	+ 3·2	28	8	5	1·50	+ 0·74	*	*	*	*
	Cullompton Ⓜ	58	37	53·5	40·6	46·9	+ 3·3	40	4	5	0·44	- 0·09	25·7	- 3·1	31	- 4
	Falmouth	54	38	51·2	43·3	47·1	+ 2·7	36	0	5	1·16	+ 0·46	24·7	- 7·7	30	- 9
	Plymouth	53	38	51·8	43·9	47·7	+ 3·5	40	0	5	1·05	+ 0·49	25·1	- 6·3	30	- 8
9 IRELAND, N.	Malin Head	53	35	47·0	38·0	42·4	- 0·1	20	11	7	1·51	+ 1·04	*	*	*	*
	Edenfel (Omagh)	54	30	48·7	36·1	42·2	+ 1·7	20	17	6	2·30	+ 1·75	*	*	*	*
	Blacksod Point	51	33	48·7	39·0	43·7	- 0·1	25	8	7	2·48	+ 1·70	*	*	*	*
	Markree Castle	55	28	49·9	38·0	43·8	+ 1·8	29	11	7	2·43	+ 1·80	18·2	- 6·3	22	- 8
	Armagh	55	33	49·2	38·2	43·5	+ 2·1	26	11	6	1·62	+ 1·18	17·6	- 6·4	21	- 8
	Donaghadee	53	34	49·0	37·4	43·0	+ 0·6	26	13	7	0·94	+ 0·52	*	*	*	*
10. IRELAND, S.	Dublin	58	35	52·3	41·7	46·8	+ 3·3	35	1	6	0·94	+ 0·51	22·2	- 6·4	27	- 8
	Birr Castle	58	29	50·6	37·3	43·8	+ 1·5	32	13	6	1·63	+ 1·13	15·2	- 10·8	18	- 13
	Kilkenny	56	33	51·9	40·3	45·9	+ 2·7	34	5	6	1·16	+ 0·69	*	*	*	*
	Waterford	53	34	50·0	41·4	45·6	+ 2·5	28	2	7	1·93	+ 1·34	*	*	*	*
	Roche's Point	53	34	50·9	39·9	45·2	+ 0·7	31	6	7	1·30	+ 0·58	*	*	*	*
	Valencia	54	31	51·1	40·4	45·6	+ 0·1	32	4	7	3·28	+ 2·42	6·5	- 23·9	8	- 29
	Killarney	53	29	49·6	39·2	44·3	- 0·3	28	8	5	2·21	+ 1·38	*	*	*	*
	Foynes	58	35	51·8	39·4	45·4	+ 1·8	35	7	6	1·47	+ 0·92	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	41	52·1	42·9	47·4	+ 1·4	38	0	4	0·69	+ 0·19	28·2	- 4·4	34	- 5
	Jersey	60	34	53·0	41·7	47·2	+ 2·3	38	1	5	0·47	- 0·03	35·0	- 0·5	42	- 1

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use.

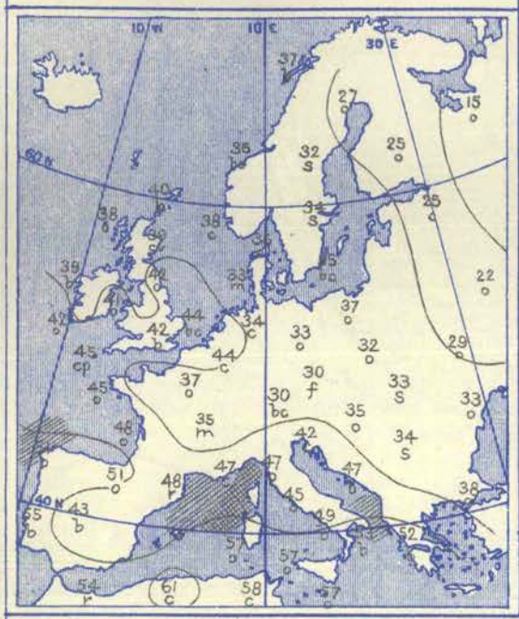
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster. For additional Reports of Sunshine, see last page.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

ERRATUM.—Jersey.—In last week's report under the heading of "Rainfall" the difference from average should read *minus* not *plus* 0·42 in. as printed.

Sunday, 15th March, 1903.

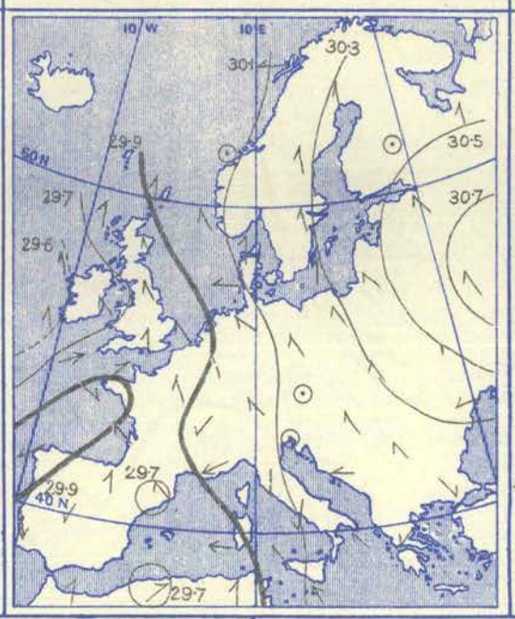
Temperature and Weather. 8 a.m.

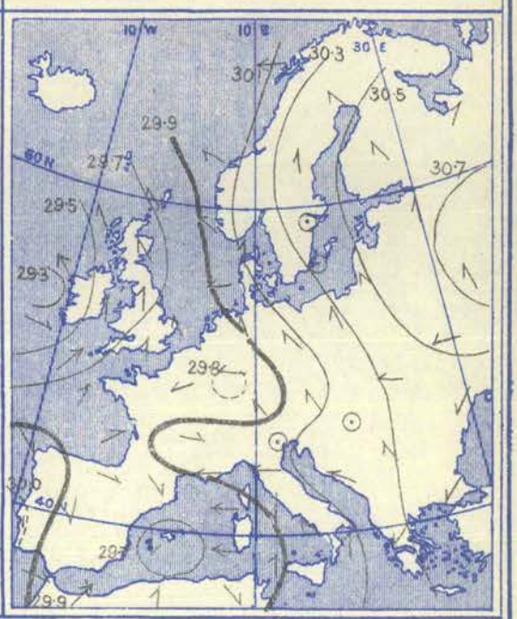


Weather in morning cloudy or dull as a whole, but fine at several of our own stations. Rainy at Oran, Perpignan, and Le Mans, and showery on our south-west coast. Snow falling at Hermanstadt, Lemberg, and on the shores of the Gulf of Bothnia. Rain later at most of our own and the French and Italian stations—as much as 0·9 in. at Valencia (Ireland), 0·7 in. at Leghorn, 1·2 ins. at Gap and Cette, 1·8 ins. at Perpignan, and 1·9 ins. at Cape Béarn. Some rather considerable falls also occurring in parts of Spain and Algeria.

Temperature showing no great or general change. Readings at 8 a.m. ranging from 61° at Algiers, 57° at Malta and Palermo, and 55° at Lisbon, to 40° or below over all the central and northern regions, to below 30° in most parts of Russia, and to 15° at Archangel. Highest in our Islands, 45° at Scilly and Dungeness, and lowest, 31° at Nairn. Maxima during day 52° at Jersey, several degrees higher in France and Italy, about 60° at several Spanish and Algerian stations, and as high as 75° at Biskra.

Barometer and Wind. 8 a.m. and 6 p.m.



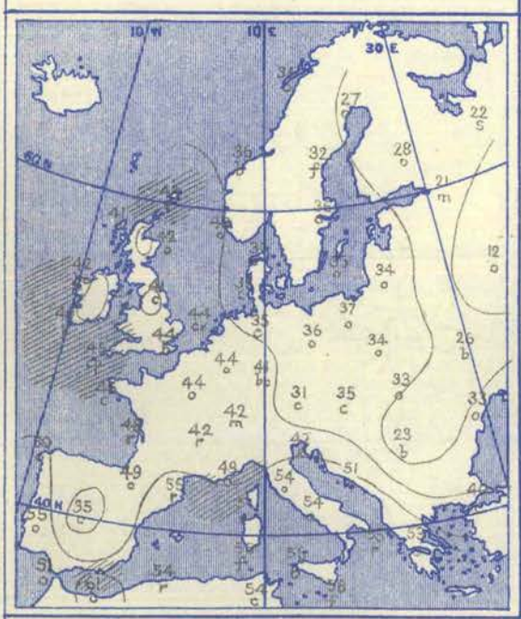


Wind in morning light and anticyclonic over the eastern half of our area; light or moderate from the South-Westward over the south of England, and from the South-Eastward over the more northern districts of the United Kingdom. Two cyclonic circulations shown over the western portion of the Mediterranean, the Easterly wind in the Riviera being strong to a gale in force. Strong Easterly winds extending to Corsica and Sardinia by evening, and the Southerly or South-Easterly winds increasing greatly in force over our Islands. No other important change as a whole, but a local cyclonic movement setting in over south Germany.

Barometer falling decidedly on our western coasts. Readings at 8 a.m. ranging from above 30·7 ins. in an anticyclone over central Russia, to below 29·7 ins. in a complex area of low pressure lying over the west of Spain, Algeria, Morocco, and the adjacent parts of the Mediterranean, and to about 29·5 ins. in a disturbance off the west of Ireland. Latter system continuing to move eastwards during day, and a small depression appearing over southern Germany.

Monday, 16th March, 1903.

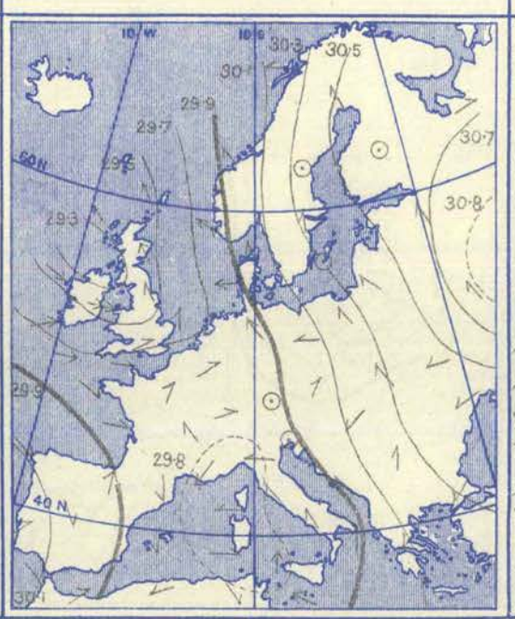
Temperature and Weather. 8 a.m.

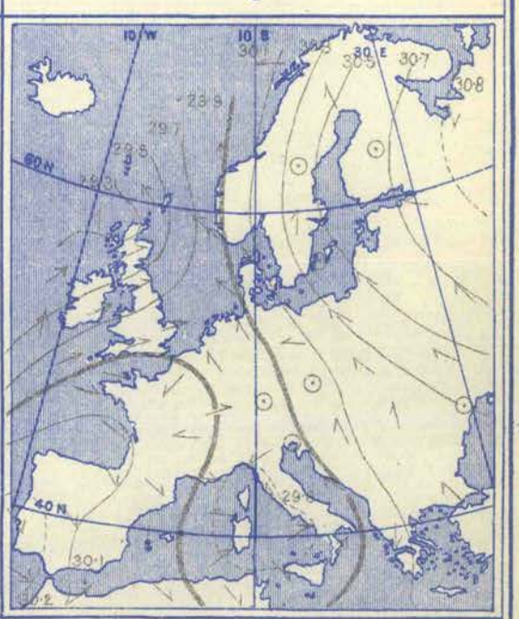


Weather at 8 a.m. cloudy or dull generally, but temporarily fair in several parts of Ireland and England. Rain falling over our north-western districts, and passing showers on our south coast. Rainy also in many parts of France and Italy, Corsica and Algeria, and snow reported at Archangel. Rain falling very generally during day over our western and northern districts, over France, Italy, the Adriatic, Greece, and in parts of Algeria—as much as 1·4 ins. at Rome.

Temperature fallen somewhat in most regions, but risen over Italy and western Algeria. Readings at 8 a.m. highest, 61° at Nemours and Oran, 58° at Malta, and 55° at Lisbon and Barcelona. Lowest, 12° at Moscow, 21° at St. Petersburg and Kharkof, 23° at Hermanstadt, 27° at Haparanda, 31° at Munich, 35° at Madrid, and 36° at Berlin and Nairn. Rising to 50° at some of our own stations later, to 55° or above in many parts of southern Europe, to 68° at Nemours, 70° at Tunis and Sfax, and to 71° at Palermo.

Barometer and Wind. 8 a.m. and 6 p.m.



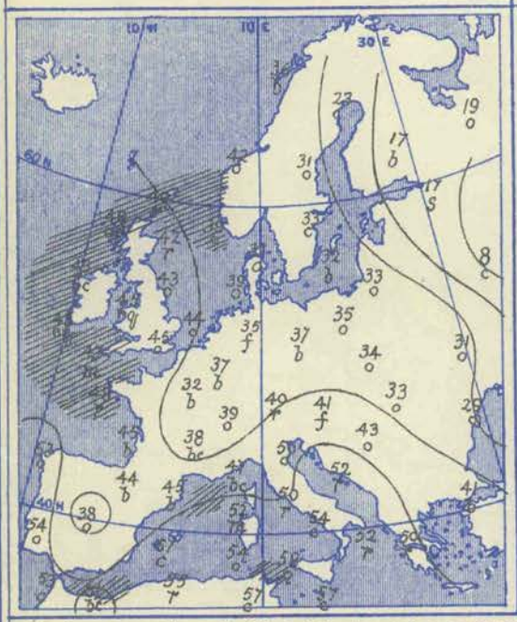


Wind in morning cyclonic over the United Kingdom and its neighbourhood, the Westerly current being strong to a gale on our western coasts, and the South-Easterly current fresh in the east of Scotland, and blowing a gale in the south-west of Norway. A separate cyclonic circulation shown around Corsica and Sardinia, but winds chiefly moderate in force. Light anticyclonic airs prevailing over Russia and the central countries. No important change during day.

Barometer risen in the extreme north-east and south-west of Europe and in Algeria, fallen in most other regions. Ranging at 8 a.m. from 30·8 ins. in a large anticyclone over central Russia, to 29·8 ins. and less in a shallow disturbance over and in the neighbourhood of Corsica and Sardinia, and to below 29·3 ins. in a deeper system over our own north-west coasts. Latter moving northwards later, but barometer falling again in Ireland; southern disturbance travelling slowly eastwards, and an anticyclone from the Atlantic extending over the Spanish Peninsula.

Tuesday, 17th March, 1903.

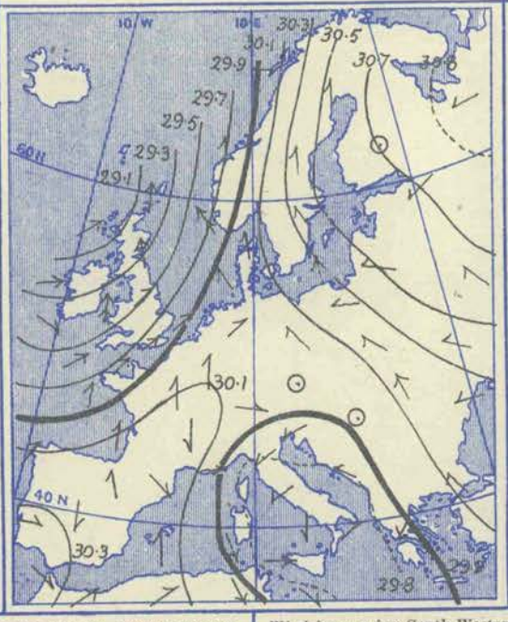
Temperature and Weather. 8 a.m.



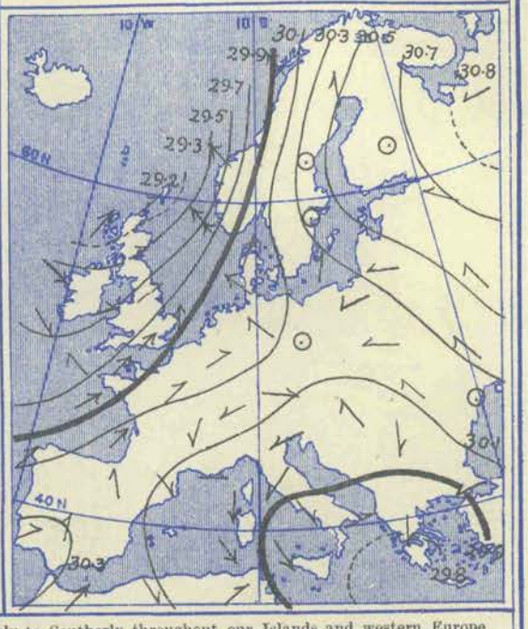
Weather at 8 a.m. fine and bright in Finland and at some stations in southern Russia, France, and the Netherlands; cloudy or very dull elsewhere, with rain in many parts of the United Kingdom, Brittany, Greece, Italy, as well as at Munich and Algiers, and snow at St. Petersburg. Fog prevailing at Cuxhaven, Sfax, and in parts of central Europe. Rain very general during day in our Islands, France, and the south of Italy; heaviest amounts—between 1 and 2 inches—over Brittany.

Temperature fallen over north-eastern Europe and France, changed little and irregularly elsewhere. Ranging at 8 a.m. from 61° at Nemours, 60° at Oran, 58° at Palermo, and above 50° in the extreme south generally, to below 40° over the central and northern countries of the Continent, and to below 20° over the north-eastern half of Russia. Lowest reading of all, 8° at Moscow. Touching 50° at several of our own stations later, and exceeding 60° in the south of France, over Spain, and Italy. Highest readings, 68° at Palermo and Tunis, and 70° at Oran.

Barometer and Wind. 8 a.m.



6 p.m.

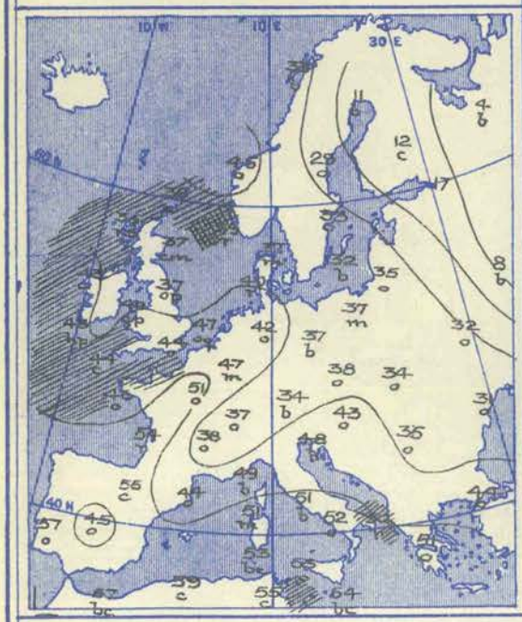


Wind in morning South-Westerly to Southerly throughout our Islands and western Europe generally, but West-North-Westerly at Valencia Island, South-Easterly at Skudesnaes, and Easterly at Bodö. Strong or fresh in force at our own stations and over the North Sea, with a fresh gale at Holyhead and in the south-west of Norway. Irregularly cyclonic over Italy and its vicinity, the North-North-Westerly wind at Cagliari blowing a moderate gale. Anticyclonic South-Easterly or Easterly airs prevailing over the eastern and north-eastern countries. Very little change later.

Barometer fallen in most regions, but risen over England, Denmark, Germany, France, the Spanish Peninsula, and Algeria. 8 a.m. readings highest, above 30·8 ins. over the extreme north of Russia, and above 30·3 ins. in the south-west of Spain. Lowest, about 29·0 ins. in a depression off the Hebrides, and below 29·8 ins. in an irregularly shaped system covering Italy and the neighbouring portion of the Mediterranean. Very little change in the general distribution later, but a small secondary disturbance appearing off Scilly, and moving quickly east-north-eastwards.

Wednesday, 18th March, 1903.

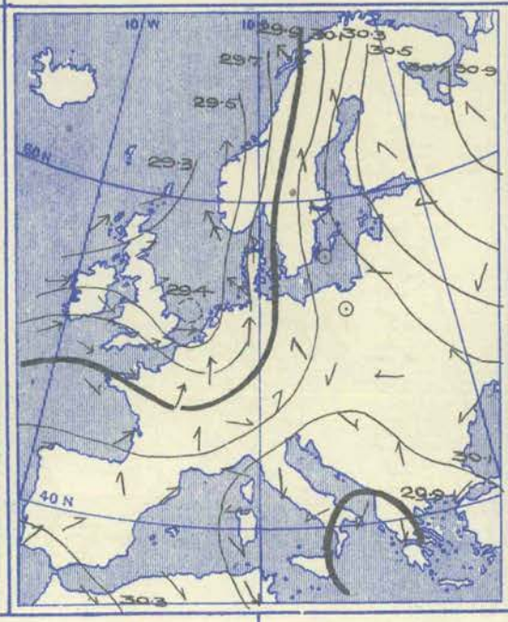
Temperature and Weather. 8 a.m.



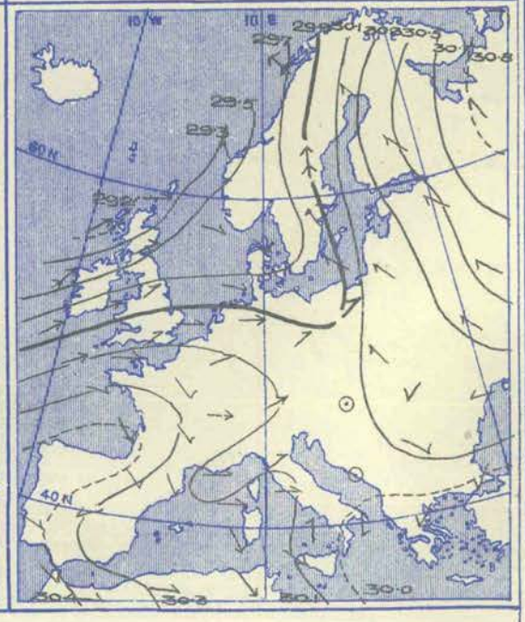
Weather at 8 a.m. cloudy or dull generally, but fine and bright over the north of Italy, the Riveria, and the greater part of north-eastern Europe. Showers falling in different parts of our Islands—of hail in Ireland and sleet in the Hebrides—and steady rain over France, the Netherlands, and at Brindisi. Rain falling later in Austria and Germany, over Sweden, Denmark, and in a few southern localities.

Temperature risen over France and Spain, fallen over the United Kingdom and the extreme north of Europe. Ranging at 8 a.m. from 59° at Algiers, 57° at Lisbon, and 55° at Biarritz, to less than 40° over the greater part of our Islands and the northern half of the Continent, to below 20° over Finland and the north of Russia, to 8° at Moscow, and to 4° at Archangel. Rising to 53° at Dungeness during day, to 66° at Marseilles, Madrid, and Barcelona, to 71° at Perpignan, and to 72° at Palma and Oran.

Barometer and Wind. 8 a.m.



6 p.m.

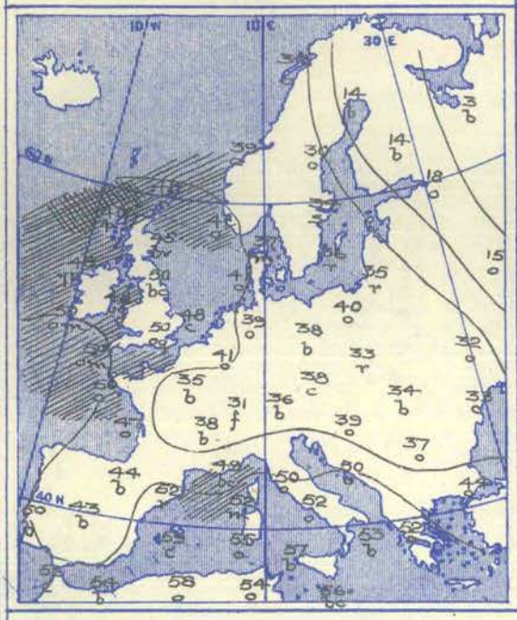


Wind fresh or strong from West or South-West on our west and north-west coasts, strong from West over our southern districts, from South in the Netherlands, and from South-East over Denmark and Norway (a whole gale blowing at Skudesnaes). Light and anticyclonic over Russia and its neighbourhood, and a light to fresh cyclonic movement shown over the Mediterranean. Increasing to a gale later at Blacksod Point, Malin Head (from South-South-West and West), and also at Hernösand (from the South-South-Eastward).

Barometer at 8 a.m. ranging from 30·9 ins. in an anticyclone over the north of Russia, and from above 30·3 ins. in another high-pressure system over and to the northward of Morocco, to less than 29·9 ins. in a shallow disturbance covering Greece and the south of Italy, to about 29·4 ins. in a small secondary system near Yarmouth, and to about 29·2 ins. in a large depression off the north of Scotland. Southern depression moving eastwards later, and that in north remaining almost stationary. Secondary system travelling quickly east-north-eastwards.

Thursday, 19th March, 1903.

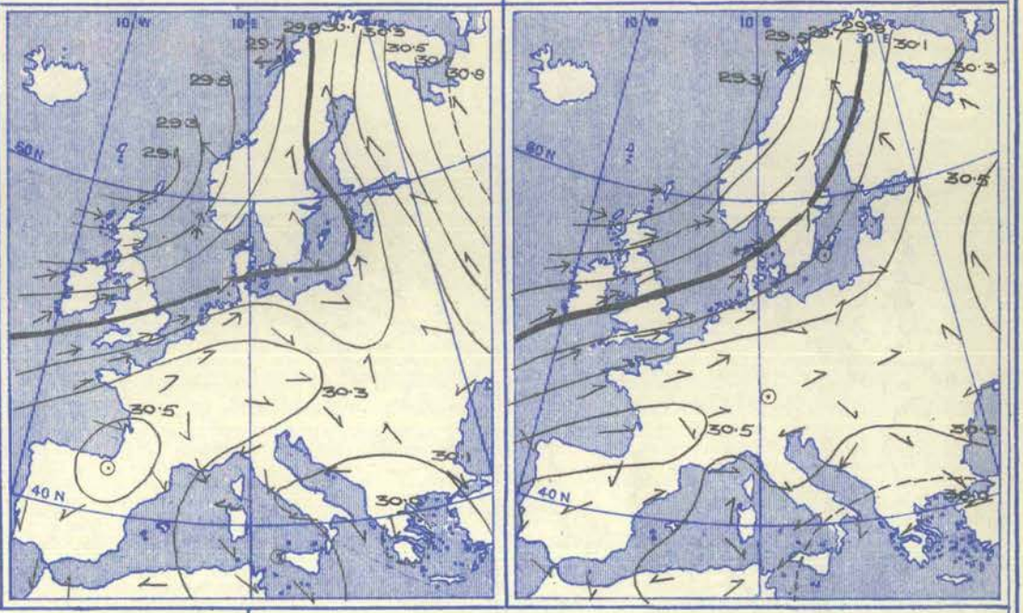
Temperature and Weather. 8 a.m.



Weather at 8 a.m. cloudy or dull as a whole, but fine and bright in most parts of France. Showery or rainy in several British and Irish localities, as well as at Barcelona, Warsaw, Memel, and Wisby, and snow falling at Stockholm. Rain falling later over our own western and northern districts, Denmark, the Netherlands, and north Germany, and rain or snow at some Scandinavian and Russian stations.

Temperature fallen over France and Spain, risen over our Islands. Readings at 8 a.m. highest, 59° at Palma, 58° at Algiers, 57° at Malta, and 53° at Leghorn. Lowest, 3° at Archangel, 14° at Haparanda, 15° at Moscow, 19° at Kharkov; below 40° over the northern half of the Continent generally, and as low as 34° at Limoges. Rising during day to 56° at North Shields, to 60° or above in the southern parts of France and Italy, to 66° at Madrid and San Fernando, and to 68° at Palermo and in Algeria.

Barometer and Wind. 8 a.m. and 6 p.m.

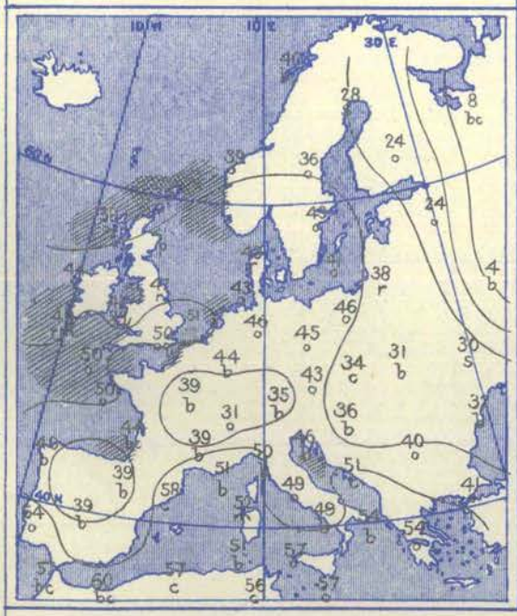


Wind in morning South-Westerly over the United Kingdom, the north of France, the Netherlands, and Denmark, and drawing into South or South-East over Scandinavia; fresh or strong generally, and blowing a gale at Pembroke and Skudesnaes. Light and anticyclonic over the north-east and extreme south-west of Europe, and light and irregularly cyclonic over the south-eastern counties. No important change during day.

Barometer risen generally, but fallen in most northern regions. Ranging at 8 a.m. from 30·8 ins. and upwards in an anticyclone over the north-east of Russia, and from 30·5 ins. and upwards in a smaller system over the south-west of France, to less than 30·0 ins. over Greece, and to 29·1 ins. and less in a large depression off the north of Scotland. Pressure decreasing very briskly over northern Europe later, and anticyclone giving way very decidedly. Scotch depression moving north-eastwards, and barometer rising again over our Islands.

Friday, 20th March, 1903.

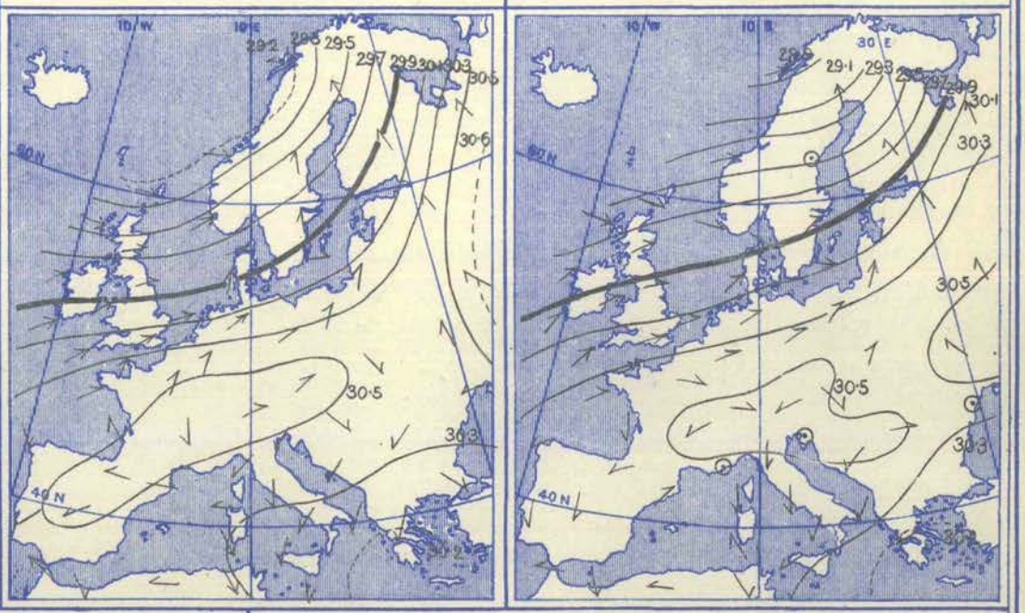
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fair or fine in most southern regions, but cloudy or dull in most northern districts. Rain falling in the west and north of our Islands generally, and sleet showers at Wick; snow prevailing at Haparanda and Uleaborg. Rainy most of day at our own western and northern stations, and rain or snow falling in many parts of northern Europe—largest amounts 0·5 in. in the Shetlands, and 0·7 in. at Valencia Island. Slighter falls of rain occurring at Brindisi and Malta.

Temperature changed irregularly. Readings at 8 a.m. ranging from 60° at Oran, and 57° at Malta and Palermo, to 51° at Roche's Point and Yarmouth, 39° at Paris, 30° at Limoges and Kiev, 28° at Haparanda 24° at St. Petersburg, 8° at Archangel, and to 4° at Moscow. Rising subsequently to 57° at Yarmouth 58° in London, 64° at Biarritz, 66° at Croisette, Madrid, San Fernando, and Cagliari, and to 68° over western Algeria. Not touching 45° in the extreme north of Scotland.

Barometer and Wind. 8 a.m. and 6 p.m.



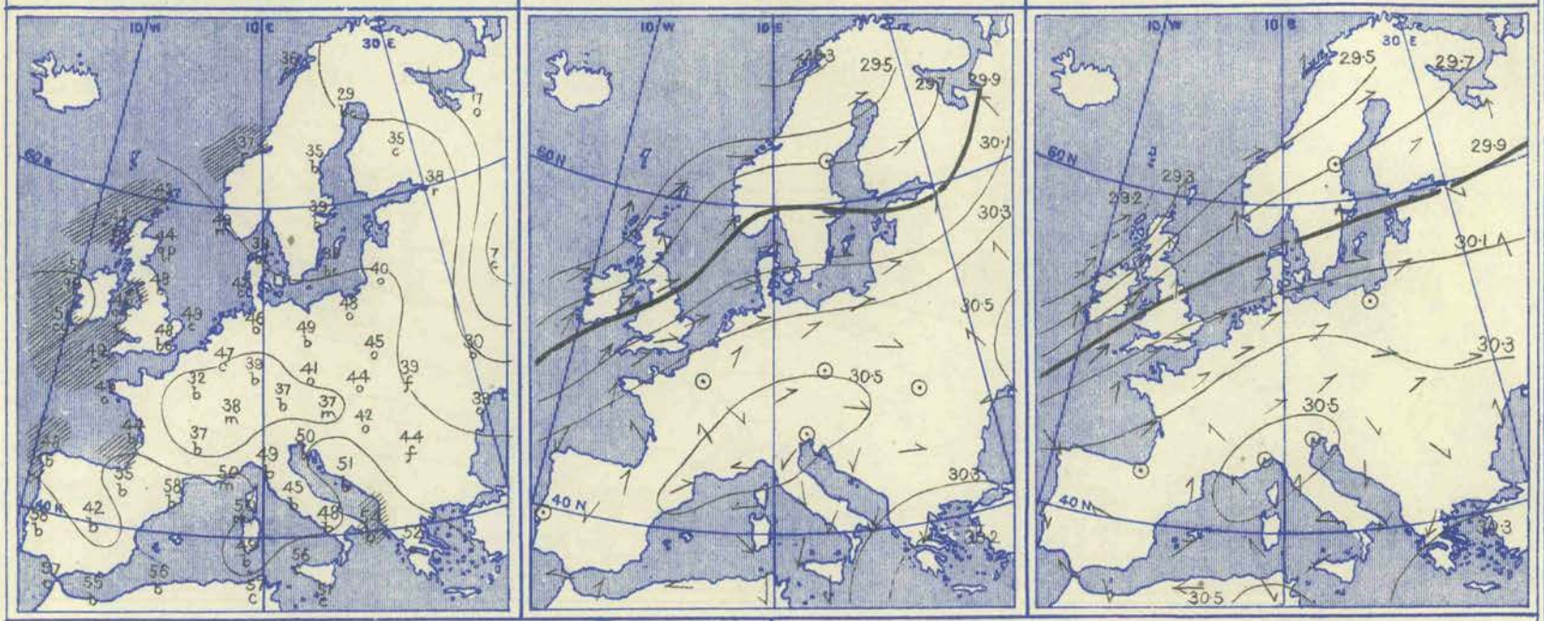
Wind in morning South-Westerly over our Islands and their neighbourhood, and drawing into south or south-east over Sweden and Finland. Fresh or strong in force in most places, and blowing a gale in the Mersey. Light or moderate, and mainly North-Easterly or Easterly over the southern countries. Veering to the Westward later over the south of Sweden, and gale subsiding in the Mersey.

Barometer risen generally, but fallen over extreme north of Europe. Readings at 8 a.m. highest, 30·6 ins. and upwards in an anticyclone over Russia, and above 30·5 ins. in an elongated anticyclone extending from central Spain to Cracow. Lowest, 29·2 ins. and less in a large depression off the west of Norway; below 30·2 ins. in another disturbance over Greece. Northern depression moving north-eastwards during day, and barometer falling briskly in the extreme north. Anticyclonic systems decreasing both in size and intensity.

Saturday, 21st March, 1903.

Temperature and Weather. — 8 a.m.

Barometer and Wind. — 8 a.m. | 6 p.m.



Weather in morning fair or fine in most countries, but overcast or very cloudy in many parts of Russia and central Europe, Norway, and all our own more western and northern districts. Rainy at St. Petersburg, Christiansund, and at some of our western and northern stations. Rain or snow falling later in most parts of Russia, and rain in the west of Norway, and at our own western and northern stations; largest amount 0·66 in. at Stornoway.

Temperature at 8 a.m. highest, 58° at Barcelona and Lisbon, 57° at La Calle, 55° at Biarritz, 51° or 50° at several Irish stations and at Leith. Lowest, 7° at Moscow, 11° at Karkov, 29° at Haparanda, 32° at Paris, 39° at Perpignan, 42° in the north of Scotland and at Madrid. Maxima during day as high as 60° at Jersey, 66° at Paris and San Fernando, 72° at Biarritz and Oran, and 73° at Clermont. Highest readings in Italy below 65°, and highest at Athens 52°.

Wind Southerly to Westerly over our Islands and throughout the northern half of Europe; light or moderate in force generally, but strong in the west of Norway, and over all our own western districts. Chiefly North-Easterly or Northerly over southern Europe and the Mediterranean, and fresh or strong in force at Palermo and in Greece. Very little change in direction later, but Southerly and South-South-Westerly winds increasing to a moderate to strong gale on the Irish and Welsh coasts.

Barometer in morning highest, above 30·4 ins. in a vast anticyclonic system extending from Spain across central and southern Europe to the centre or to the east of Russia. Lowest, below 29·3 ins. in a disturbance over Finmark, and below 29·5 ins. in another system approaching our north-west coasts. Barometer falling briskly on our west and north-west coasts during day, and by 6 p.m. becoming lowest (29·18 ins.) at Stornoway.

IV.—GENERAL NOTES, etc.

During nearly the whole of this period there were two anticyclonic areas in existence—one (and that the more important) embracing north-eastern and northern Russia, and the other extending from the Atlantic over the Spanish Peninsula. These systems were joined by a col stretching across the central countries, and to both the north-westward and the southward of this col depressions of varying intensity were shown. Those to the north-westward were mostly large and deep, their centres moving north-eastwards outside our western and northern coasts, and on to the extreme north of Europe, while those in the south were mostly shallow, and located over some part of the Mediterranean or its immediate neighbourhood. The prevailing wind current over the north-western countries was consequently Southerly and South-Westerly to Westerly, and over our Islands, the North Sea, and Norway, it was fresh or strong to a gale in force. Over the southern regions there was generally an irregular cyclonic circulation of light to fresh winds. Towards the end of the week the Russian anticyclone moved southwards, and gave way somewhat, while that in the south-west travelled east-north-eastwards, and at the same time extended southwards, and thus displaced the Mediterranean cyclonic systems. Temperature was rather unsteady, but on the whole exhibited an upward tendency, 8 a.m. readings of 60° being sometimes reported from the extreme south. Rain was very frequent over the north-west and west of the United Kingdom, and the amounts were occasionally heavy, while falls of rain or snow were experienced at times over northern Europe generally. Some very heavy rains occurred at the beginning of the week over Italy, the extreme south of France, and in some Spanish localities, but otherwise the weather in the southern regions was mostly fair.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 62.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	23·6	- 1·3	29	- 2	SHEFFIELD	23·3	—	28	—	WESTBOURNE	34·1†	+ 1·1	41†	+ 1
STRATHPEFFER SPA	17·1	- 3·5	21	- 4	WORKSOP	19·5	- 4·2	23	- 5	VENTNOR HOSPITAL	34·3	0·0	41	0
EDINBURGH	12·7	- 9·3	15	- 11	THURCASTON	17·3	- 6·2	21	- 8	BOURNEMOUTH	27·8	—	33	—
COCKLE PARK	20·8	—	25	—	TUNBRIDGE WELLS	32·4†	—	39†	—	MARLBOROUGH	27·2	+ 2·0	33	+ 2
NEWCASTLE-ON-TYNE	15·8	—	19	—	MARGATE	22·9	- 6·0	28	- 7	SOUTHPORT	13·2	—	16	—
YORK	15·7	- 8·8	19	- 11	BROADSTAIRS					RHYL	27·9	—	34	—
CROMER	19·4	—	23	—	RAMSGATE	—	—	—	—	ABERDOVEY	19·3†	—	23†	—
LOWESTOFT	21·2	—	26	—	EASTBOURNE	30·7	- 1·3	37	- 2	TENBY	19·4	- 13·9	23	- 17
HOLLESLEY BAY	23·7	—	29	—	BRIGHTON	31·9	+ 0·4	38	+ 1	TORQUAY	27·7	- 5·3	40	- 6
DUNMOW	29·7	—	36	—	WORTHING	33·2	—	40	—	NEWQUAY	22·5	- 9·5	27	- 12
					BOGNOR	37·3†	—	45†	—	GUERNSEY	38·9†	+ 4·1	47†	+ 5
					WATERGATE PARK	29·1	—	35	—					

† The values at Tunbridge Wells, Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Mar. 7th, 1903.	Watergate Park	—	—	—	—	—	—	—	—	—	—	—	15·3	—	20	—
,, ,, ,, 14th, ,,	Rhyl	—	—	—	—	—	—	—	—	—	—	—	21·3	—	27	—
,, ,, ,, ,, ,,	Killarney	57	30	50·9	36·0	43·2	- 1·0	34	17	6	1·52	+ 0·64	—	—	—	—
,, ,, ,, ,, ,,	Hawarden Bridge	52	37	48·0	39·4	43·6	+ 1·5	22	7	5	1·19	—	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 12.] *Third Series.* WEEK ENDING SATURDAY, MARCH 28TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 68.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	55	32	48·3	37·9	43·0	3 above	24	+10	11	−17	127	+ 28	333	− 81
	1. SCOTLAND, EAST	58	32	49·8	38·0	43·7	3 above	29	+ 9	11	−19	170	+ 39	361	−105
	2. ENGLAND, N.E.	64	36	56·1	41·5	48·6	7 above	48	+27	1	−24	262	+121	242	−155
	3. ENGLAND, EAST	68	36	58·8	43·6	50·9	8 above	62	+34	0	−27	316	+143	230	−208
	4. MIDLAND COUNTIES	66	34	56·2	41·8	48·8	7 above	48	+19	1	−26	286	+ 94	249	−191
	5. ENGLAND, SOUTH	67	37	55·8	44·9	50·2	7 above	57	+27	0	−20	321	+112	143	−198
Principal Grazing Districts.	6. SCOTLAND, WEST	54	31	49·6	40·3	44·8	3 above	27	+ 6	5	−17	199	+ 53	211	−125
	7. ENGLAND, N.W.	62	34	54·1	42·3	48·1	6 above	43	+21	0	−21	268	+113	186	−140
	8. ENGLAND, S.W.	62	35	54·0	43·5	48·6	5 above	46	+17	0	−17	338	+105	109	−151
	9. IRELAND, NORTH	56	32	49·6	38·5	43·9	1 above	28	+ 2	10	− 8	228	+ 27	228	− 60
	10. IRELAND, SOUTH	61	31	52·0	40·8	46·3	2 above	35	+ 4	3	−10	343	+ 63	129	− 84
	— CHANNEL ISLANDS	66	40	56·1	45·0	50·4	4 above	59	+25	0	− 6	440	+126	37	− 71

Rainfall.

	DISTRICTS. (See p. 68.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	18	10 more	69	+13	23·4	+10·7
	1. SCOTLAND, EAST	6	10	5 more	55	+10	12·0	+ 5·3
	2. ENGLAND, N.E.	5	4	0 (average)	42	0	4·7	− 0·2
	3. ENGLAND, EAST	5	6	2 more	38	− 6	3·8	− 0·9
	4. MIDLAND COUNTIES	5	8	4 more	43	+ 2	6·8	+ 1·1
	5. ENGLAND, SOUTH	5	8	3 more	48	+ 7	6·4	+ 0·3
Principal Grazing Districts.	6. SCOTLAND, WEST	6	22	14 more	68	+19	21·6	+ 9·3
	7. ENGLAND, N.W.	5	7	2 more	56	+10	10·8	+ 3·6
	8. ENGLAND, S.W.	6	12	6 more	58	+10	11·9	+ 2·7
	9. IRELAND, NORTH	7	16	10 more	67	+13	13·4	+ 5·7
	10. IRELAND, SOUTH	7	21	15 more	64	+14	14·8	+ 5·1
	— CHANNEL ISLANDS	6	6	1 more	60	+ 9	8·4	+ 0·8

Bright Sunshine.

	DISTRICTS. (See p. 68.)	For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	17	− 8	19	− 9	111	− 56	14	− 7
	1. SCOTLAND, EAST	23	− 4	26	− 5	152	− 51	19	− 6
	2. ENGLAND, N.E.	23	− 9	27	−11	180	− 40	22	− 5
	3. ENGLAND, EAST	40	+ 9	46	+11	242*	+ 9	29	+ 1
	4. MIDLAND COUNTIES	24	− 1	28	− 2	182	− 14	22	− 2
	5. ENGLAND, SOUTH	35	+ 3	41	+ 3	222	− 5	27	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	19	− 9	22	−10	130	− 63	16	− 8
	7. ENGLAND, N.W.	19	− 9	22	−10	173	− 24	21	− 3
	8. ENGLAND, S.W.	24	−10	28	−11	191	− 58	23	− 7
	9. IRELAND, NORTH	23	− 4	26	− 5	169	− 33	21	− 4
	10. IRELAND, SOUTH	21	−10	24	−11	177	− 57	22	− 7
	— CHANNEL ISLANDS	37	0	43	0	254	− 29	30	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather has been of a very unsettled character throughout the Kingdom, but whereas in Ireland and the extreme west and north of Great Britain the sky was mostly very cloudy or overcast and rain frequent and heavy, in the east and south of England there were many very fine intervals. Thunder and lightning were experienced in various parts of the Kingdom, but more over England and Scotland than over Ireland.

Temperature was again above the mean, the excess ranging from only 1° or 2° in Ireland, and 3° over Scotland, to as much as 6° or 7° in most parts of England, and to 8° in England E. The highest of the maxima were recorded on the 25th, when they were unusually high over southern, central, and eastern England. The highest values were 68° at Cambridge, 67° in London, and 66° at Bawtry and Colly Weston. In the extreme north and north-west the maxima were several degrees below 60°. The lowest of the minima were registered on the 24th over England, but on irregular dates elsewhere; they ranged from 31° or 32° in Scotland and Ireland, to 37° in England S., and to 40° in the Channel Islands.

Rainfall exceeded the mean in all districts excepting England N.E., the excess being again very large in Ireland and Scotland, and considerable in England S.W.

Bright Sunshine was again deficient over the Kingdom as a whole, but just equalled the normal in the Channel Islands, and exceeded it in England S. and E. The percentages of the possible duration ranged from 46 in England E., 43 in the Channel Islands, and 41 in England S., to very little above 20 in the north-western districts, and to 19 in Scotland N.

Barometer and Wind.—The distribution of pressure was very similar in its main features to that of the preceding weeks, a series of large and deep disturbances passing north-eastwards outside our Islands, while their secondaries advanced directly over us. A continuation of strong Southerly to Westerly winds has consequently been experienced generally, with frequent gales on our west and south-west coasts.

Earthquake shocks were felt at 1.30 p.m. on Tuesday at Fulbeck, at Chatsworth, and in many other parts of Derbyshire as well as in Staffordshire and Lincolnshire.

207 | 90 Wy & S. Ltd.
31ə | 70 12 | 02

II.—DATA from which the SUMMARY on page 67 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	48	35	46·1	39·4	42·7	+ 3·5	16	7	7	0·64	+ 0·04	*	*	*	*
	Stornoway	52	34	47·7	37·9	42·7	+ 2·3	22	11	7	2·17	+ 1·45	21·0	− 6·4	24	− 7
	Wick	50	32	47·4	37·0	42·1	+ 1·7	22	14	6	0·28	− 0·15	*	*	*	*
	Lairg 𝔖	54	34	49·7	36·3	42·8	+ 4·4	30	16	6	0·74	+ 0·07	*	*	*	*
	Glencarron 𝔖	55	33	48·7	36·6	42·5	+ 3·1	26	15	7	2·46	+ 1·06	*	*	*	*
	Fort Augustus 𝔖	54	34	49·4	38·1	43·6	+ 2·8	28	11	7	1·86	+ 1·21	15·3	− 4·8	18	− 6
	Fort William	55	35	49·1	39·7	44·3	+ 2·8	26	6	7	4·54	+ 3·34	7·5	− 17·3	9	− 20
1. SCOTLAND, E.	Nairn	56	33	51·4	36·4	43·7	+ 3·0	35	16	4	0·37	+ 0·01	*	*	*	*
	Aberdeen	52	36	49·3	40·0	44·5	+ 3·3	26	6	6	0·50	0·00	25·0	− 4·8	29	− 6
	Braemar 𝔖	50	32	45·6	35·9	40·6	+ 3·3	10	23	7	1·81	+ 1·26	*	*	*	*
	Ochtertyre 𝔖	54	35	49·0	38·3	43·5	+ 2·3	26	10	7	1·80	+ 1·24	*	*	*	*
	Leith 𝔖	58	37	52·4	40·3	46·2	+ 3·9	37	5	6	0·94	+ 0·63	*	*	*	*
	Marchmont 𝔖	54	33	51·3	36·9	43·9	+ 3·8	35	14	5	0·66	+ 0·12	20·3	− 6·1	23	− 7
2. ENGLAND, N.E.	Alnwick Castle	58	36	54·8	41·2	47·8	+ 7·0	44	2	3	0·13	− 0·38	*	*	*	*
	Durham	58	36	54·2	? 38·9	46·3	+ 5·3	43	9	5	0·36	− 0·08	18·6	− 8·5	21	− 10
	Shields	60	39	55·4	43·1	49·1	+ 7·6	50	0	4	0·18	− 0·21	*	*	*	*
	Scarborough 𝔐	64	36	57·0	40·3	48·4	+ 6·3	52	5	4	0·34	− 0·06	21·1	—	24	—
	Spurn Head	62	39	56·7	43·1	49·7	+ 8·0	54	0	5	0·51	+ 0·25	*	*	*	*
	Fulbeck (Lincolnshire)	64	37	58·4	42·3	50·1	+ 8·0	57	0	6	0·76	+ 0·44	37·3	—	43	—
3. ENGLAND, E.	Hillington 𝔐	68	40	60·2	44·3	52·0	+ 9·5	70	0	4	0·77	+ 0·40	38·5	+ 9·2	44	+ 11
	Yarmouth	64	36	57·1	42·9	49·8	+ 8·3	55	0	5	0·45	+ 0·06	*	*	*	*
	Geldeston	65	38	60·1	43·4	51·5	+ 8·9	67	0	4	0·36	+ 0·02	41·0	+ 9·3	47	+ 11
	Cambridge	68	37	60·9	42·6	51·5	+ 8·5	67	0	5	0·87	+ 0·55	42·4	+ 11·6	49	+ 13
	Felixstowe	60	38	56·1	45·1	50·4	+ 7·7	59	0	6	0·20	—	46·6†	—	54†	—
	Rothamsted	66	36	57·6	42·7	49·9	+ 7·7	55	0	6	1·04	+ 0·65	36·5	+ 7·1	42	+ 8
	Shoeburyness	64	39	59·3	44·1	51·5	+ 8·3	67	0	4	0·20	− 0·07	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	62	37	55·1	41·6	48·2	+ 7·5	45	1	5	0·49	0·00	18·3	—	21	—
	Bawtry (Hesley Hall)	66	36	58·6	42·4	50·3	+ 7·8	58	0	4	0·57	+ 0·21	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	66	37	58·4	42·6	50·3	+ 7·6	58	0	3	0·33	− 0·01	*	*	*	*
	Cheadle 𝔐	61	34	55·0	40·5	47·5	+ 6·0	45	4	5	0·78	+ 0·32	*	*	*	*
	Birmingham (Edgbaston)	61	36	55·5	41·6	48·3	+ 6·4	46	1	5	0·94	+ 0·57	17·5	—	20	—
	Churchstoke 𝔐	60	36	55·1	40·6	47·6	+ 6·2	45	4	6	0·61	+ 0·18	27·4	− 1·6	31	− 2
	Hereford 𝔐	62	38	55·5	42·3	48·7	+ 5·6	47	0	6	1·15	+ 0·79	*	*	*	*
	Cirencester	61	35	55·9	40·4	47·9	+ 6·2	48	4	6	0·90	+ 0·49	30·7	+ 1·2	36	+ 1
	Oxford	65	39	56·7	44·3	50·3	+ 7·0	58	0	6	1·12	+ 0·77	29·2	+ 0·2	34	0
5. ENGLAND, S.	London	67	39	59·7	44·6	51·9	+ 7·9	69	0	4	0·58	+ 0·24	30·6‡	+ 8·3‡	36‡	+ 10‡
	Swarraton (Alresford) 𝔐	62	37	56·3	43·7	49·8	+ 7·9	55	0	6	1·17	+ 0·73	*	*	*	*
	Dungeness	60	40	55·1	45·7	50·3	+ 7·6	58	0	5	0·37	+ 0·04	34·8	—	41	—
	Hastings (St. Leonards)	58	40	54·4	45·6	49·9	+ 6·6	55	0	5	0·30	− 0·14	37·2	+ 2·8	43	+ 3
	Southampton	65	40	58·3	46·4	52·2	+ 7·7	71	0	6	1·05	+ 0·62	35·2	+ 3·0	41	+ 4
	Portland Bill	54	41	52·9	44·4	48·5	+ 3·6	46	0	5	0·79	—	*	*	*	*
	Shaftesbury 𝔐	57	40	54·2	43·7	48·8	+ 6·7	48	0	5	1·00	+ 0·52	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	35	48·5	40·0	44·1	+ 1·6	23	6	7	5·09	+ 3·85	*	*	*	*
	Glasgow	54	36	49·3	40·3	44·7	+ 3·3	26	5	6	1·66	+ 1·15	16·1	− 6·5	19	− 8
	Cally 𝔖	52	31	50·2	39·7	44·8	+ 3·0	29	6	7	1·76	+ 1·06	*	*	*	*
	Aspatria	52	37	50·2	40·2	45·1	+ 3·7	29	5	5	1·73	—	18·8	—	22	—
	Douglas (Isle of Man)	52	34	49·6	41·3	45·3	+ 2·8	26	2	7	0·51	− 0·08	22·9	− 10·9	26	− 13
7. ENGLAND N.W	Newton Reigny	55	34	50·7	40·7	45·6	+ 5·3	31	4	7	2·35	—	16·1	—	19	—
	Stonyhurst	59	38	54·0	41·4	47·5	+ 6·0	41	2	4	0·49	− 0·21	16·2	− 10·8	19	− 12
	Blackpool 𝔐	57	37	54·0	42·8	48·2	+ 5·9	43	0	5	0·22	− 0·21	16·6	− 10·4	19	− 12
	Manchester (Prestwich)	62	36	56·4	42·9	49·5	+ 7·5	53	0	5	0·51	− 0·02	13·6	—	16	—
	Liverpool Obsy. (Bidston)	60	38	55·3	43·6	49·3	+ 6·3	51	0	5	0·19	− 0·18	21·5	—	25	—
	Chester (Hawarden Bridge)	62	38	57·9	41·3	49·4	+ 5·6	55	2	2	0·13	—	*	*	*	*
	Llandudno 𝔐	59	37	54·9	42·6	48·6	+ 4·6	46	0	5	0·77	+ 0·36	23·5	− 4·3	27	− 5
	Holyhead	51	41	49·7	43·1	46·3	+ 2·4	30	0	7	1·19	+ 0·72	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	52	42	50·6	44·6	47·5	+ 3·9	39	0	6	0·78	+ 0·30	22·4	− 11·4	26	− 13
	Clifton	61	40	56·8	44·4	50·4	+ 6·8	59	0	6	1·30	+ 0·80	*	*	*	*
	Bath	61	38	56·0	44·1	49·9	+ 6·5	55	0	6	1·24	+ 0·80	27·8	—	32	—
	Arlington (N. Devon)	57	35	52·7	40·7	46·5	+ 4·7	37	4	5	1·54	+ 0·80	*	*	*	*
	Cullompton 𝔐	62	36	55·4	44·2	49·6	+ 5·1	53	0	6	0·92	+ 0·39	20·2	− 10·5	24	− 12
	Falmouth	57	39	53·2	43·5	48·2	+ 3·1	43	0	6	1·24	+ 0·55	27·1	− 7·9	32	− 9
	Plymouth	55	38	53·5	42·9	48·0	+ 3·1	42	0	5	1·13	+ 0·58	27·2	− 6·4	32	− 7
9. IRELAND, N.	Malin Head	53	36	48·3	38·7	43·4	+ 0·1	24	9	6	0·59	+ 0·14	*	*	*	*
	Edenfel (Omagh)	54	32	48·9	37·9	43·2	+ 1·7	26	11	7	2·00	+ 1·45	*	*	*	*
	Blacksod Point	51	39	49·7	41·4	45·4	+ 0·8	26	2	7	2·08	+ 1·33	*	*	*	*
	Markree Castle	50	34	49·9	36·4	43·0	+ 0·2	31	16	7	1·85	+ 1·24	23·7	− 3·0	27	− 4
	Armagh	56	33	51·6	37·9	44·6	+ 2·4	35	11	6	1·43	+ 0·98	21·4	− 4·9	25	− 6
	Donaghadee	52	33	49·4	38·4	43·7	+ 0·6	27	10	6	1·49	+ 1·08	*	*	*	*
10. IRELAND, S.	Dublin	61	38	55·0	42·7	48·7	+ 4·2	47	0	7	0·40	− 0·03	25·8	− 4·9	30	− 6
	Birr Castle	58	31	52·4	37·7	44·8	+ 1·6	38	12	7	2·01	+ 1·51	21·5	− 6·7	25	− 8
	Kilkenny	57	33	52·6	40·9	46·6	+ 2·5	37	3	6	1·21	+ 0·73	*	*	*	*
	Waterford	52	35	51·4	40·7	45·9	+ 2·2	33	4	7	1·21	+ 0·63	*	*	*	*
	Roche's Point	52	40	50·6	42·4	46·4	+ 1·2	31	0	7	1·11	+ 0·41	*	*	*	*
	Valencia	53	38	51·3	41·9	46·5	+ 0·3	32	0	7	3·23	+ 2·37	15·1	− 17·5	18	− 20
	Killarney	55	34	52·5	41·1	46·6	+ 1·3	36	3	7	5·72	+ 4·92	*	*	*	*
	Foynes	55	34	50·5	38·9	44·5	+ 0·1	31	9	5	1·93	+ 1·39	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	42	53·1	44·6	48·7	+ 2·1	47	0	6	0·93	+ 0·43	22·5	− 12·5	26	− 15
	Jersey	66	40	59·0	45·3	52·0	+ 6·1	70	0	5	0·30	− 0·18	40·3	+ 2·3	47	+ 3

Stations Marked 𝔐 are in connection with the Royal Meteorological Society, and those marked 𝔖 with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

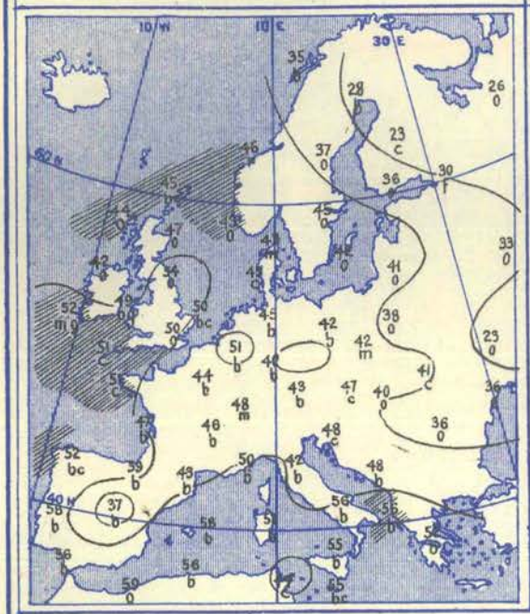
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

ERRATUM.—The Bright Sunshine values at Geldeston for last week are 20·9 hours; − 8·8 hours; 25 %; − 11 %.

Sunday, 22nd March, 1903.

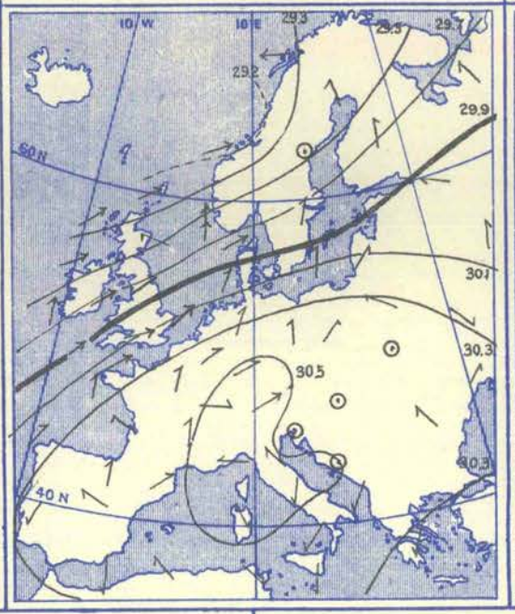
Temperature and Weather. 8 a.m.



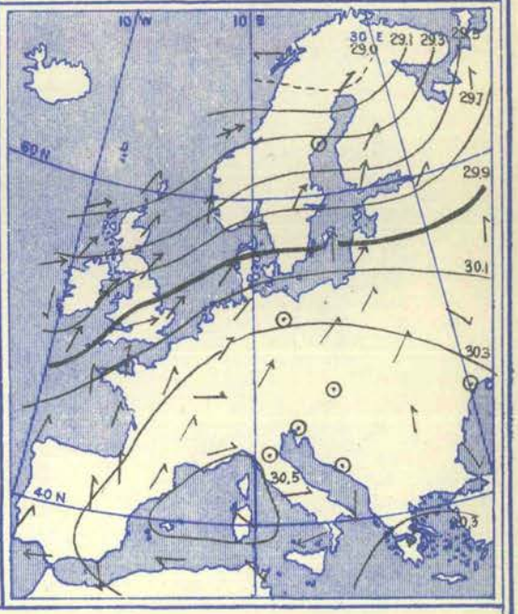
Weather in morning fine and bright over Spain, France, the west and north of Germany, and the south-east of England, dull and gloomy over Ireland, Scotland, northern and eastern Europe. Heavy rain over Ireland later, and smaller quantities over the northern and western parts of Great Britain, and in Norway, where also the weather was very gloomy and misty at times.

Temperature changing very irregularly; risen in most places—rapidly over Russia and France—but fallen in the north of Ireland, Finland, and many parts of Germany. Morning readings highest, 61° at Bilbao, 58° at Palma and Lisbon, and above 50° at nearly all coast stations in south-western and southern Europe, and the southern and eastern parts of Ireland and England. Lowest (1) 23° at Kuopio, 26° at Archangel, 28° at Haparanda and Uleaborg; (2) 23° at Kiev, 27° at Bodö, and below 40° all over Russia. Rising later to 75° at Bilbao, to between 65° and 70° in many other parts of southern Europe, to 60° and more in the south and east of England, and to more than 50° at almost all our own stations.

Barometer and Wind. 8 a.m.



6 p.m.

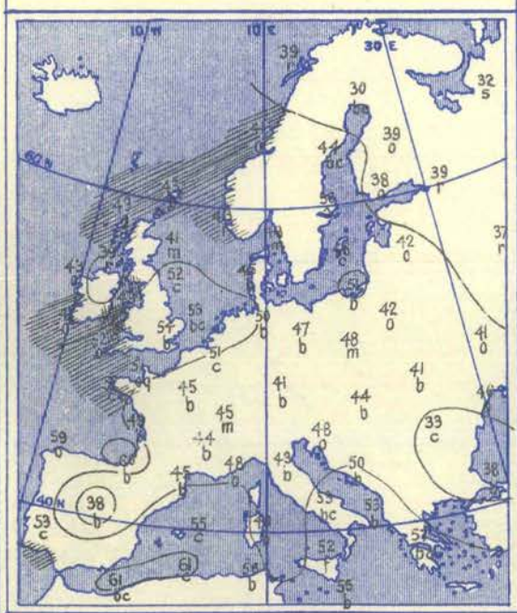


Wind light and anticyclonic over southern Europe generally; Southerly and South-Westerly strong to a gale over the United Kingdom and the North Sea, more moderate over northern Europe, Easterly to Northerly and very light over the Mediterranean. Blowing hard later in most parts of our Islands, and very strongly over north-western and northern Europe generally, but remaining moderate over France and Germany.

Barometer highest, 30·54 ins. at Florence, and exceeding 30·3 ins. all over the central and southern parts of Europe, with the Mediterranean and north Africa. Lowest, 29·13 ins. at Christiansund, and below 29·4 ins. at all stations in the north of Scotland and the north-west of Norway; gradients steepest in the north and north-west. Falling generally later, but beginning to rise on our extreme north-west coasts; secondary depression appearing over the north of Ireland.

Monday, 23rd March, 1903.

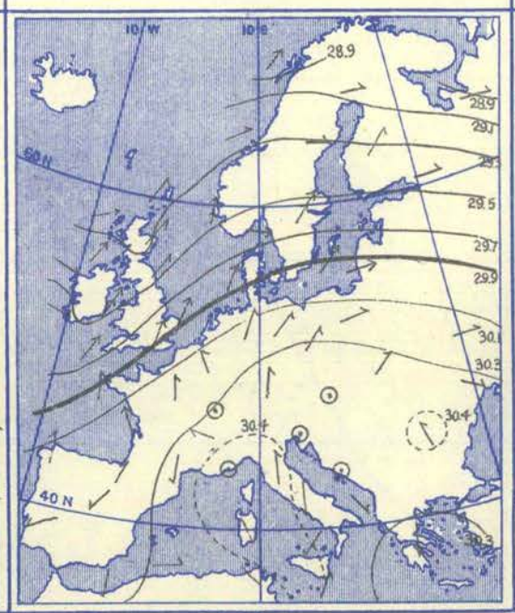
Temperature and Weather. 8 a.m.



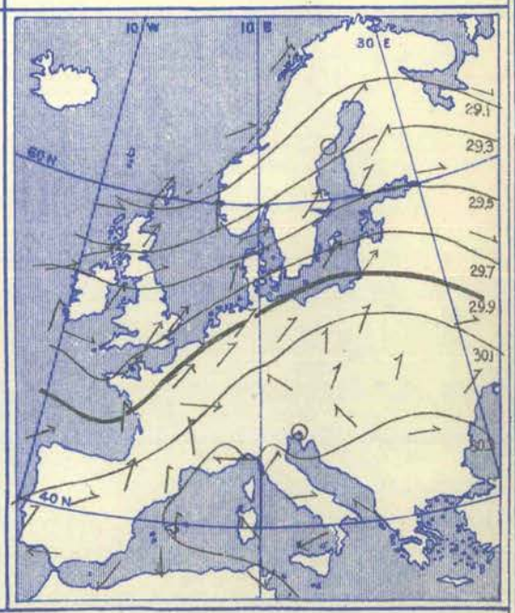
Weather in morning fine in the more southern regions, cloudy or overcast in most northern countries. Rainy at several of our own western and northern districts, and snow f: lling at Parsonstown. Raining in several parts of Scandinavia and at St. Petersburg, and snow at Archangel. Rain becoming general later throughout our Islands and Brittany, and a considerable amount occurring at Hermanstadt.

Temperature at 8 a.m. highest, 61° at Algiers and Nemours, 60° at Biarritz, 59° at Corunna, 57° at San Fernando and Patras, and 54° at several English stations. Lowest, (1) 30° at Haparanda, 32° at Archangel; (2) 33° at Hermanstadt; (3) 34° at Parsonstown; (4) 38° at Madrid, and 45° at Rome. Rising subsequently to 64° at Yarmouth and in London, to 67° at Florence, 70° at Madrid, and to above 70° at some French stations; highest value reported, 77° at Biarritz. Maxima over central Europe nearly all a little below 70°.

Barometer and Wind. 8 a.m.



6 p.m.

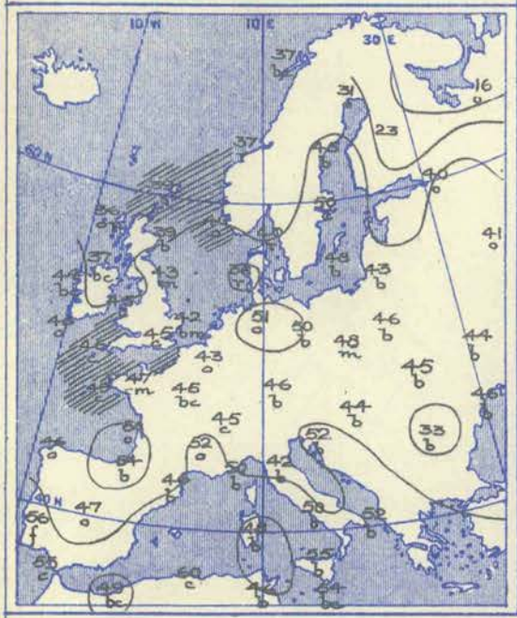


Wind in morning Southerly to South-Westerly over the United Kingdom and northern Europe generally, but North-Westerly at some Irish stations. Fresh or strong in force generally, with a gale at Stockholm, Skudesmes, and on the coast of Wales. Variable and mostly light over the Mediterranean and the southern regions. Very little change later, but gales subsiding except in the south-west of Norway, and wind backing again in Ireland.

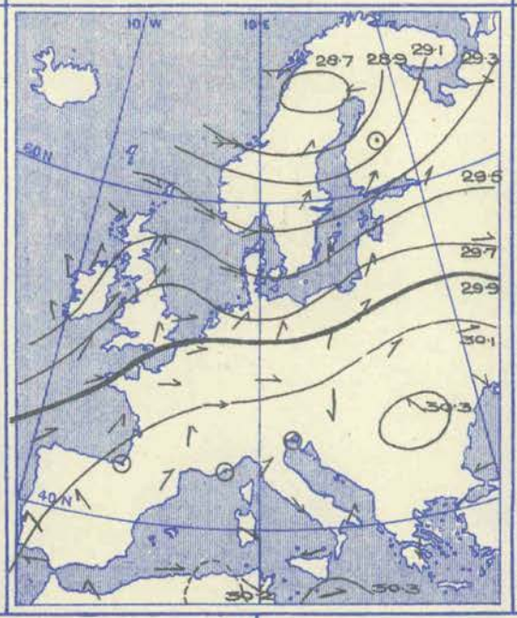
Barometer fallen in nearly all localities. Readings at 8 a.m. highest, 30·3 ins. to 30·4 ins. and upwards in a large area embracing the more southern and south-eastern parts of Europe; lowest, 28·9 ins. and less in a large depression over Lapland and the extreme north of Russia; 29·2 ins. to 29·5 ins. in a V-shaped system over our own western districts. Latter becoming less distinct by evening, and pressure decreasing except in the extreme north of Europe.

Tuesday, 24th March, 1903.

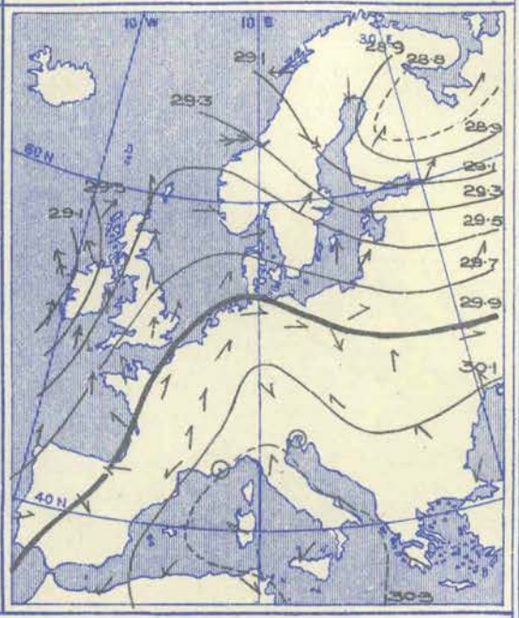
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. still fine in most of the southern and central countries; cloudy or overcast over our Islands (except at some Scotch stations), Scandinavia, and northern Russia. Showery in Ireland, the Hebrides, and in some English localities, and rainy at Fanö and Christiansund, snow falling at Haparanda and Uleaborg. More than an inch of rain experienced later in the west of Ireland, and considerable falls of rain or snow in Finland. Rain (mostly light) falling in most parts of our Islands.

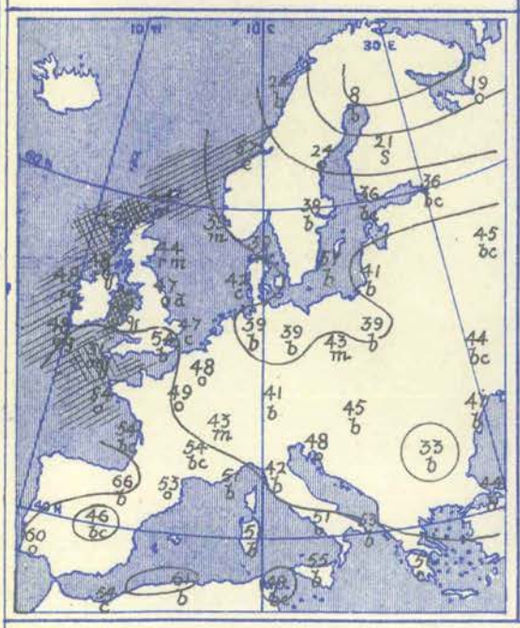
Temperature changed irregularly. Readings at 8 a.m. ranging from 60° at Algiers, 56° at Lisbon, and 55° at Malta, to 50° at Stockholm, 41° at Moscow, 36° at Nairn, 31° at Haparanda, and to 16° at Archangel. Rising later to 55° in London, above 60° in Austria, Italy, and France, to 68° at Patras, Algeria, and Lisbon, and to 70° at San Fernando, Biarritz, Cracow, and Breslau.

Wind in morning Southerly in Ireland, South-Westerly to Westerly over Great Britain and northern Europe generally, but Easterly in the north of Scandinavia. Moderate to fresh in some localities, and attaining a fresh gale at Christiansund. Light and variable in all the southern regions. Wind backing to Southward over Great Britain later, and increasing to a strong gale at several of our western stations. Veering to North-West on north in Sweden, and blowing strongly.

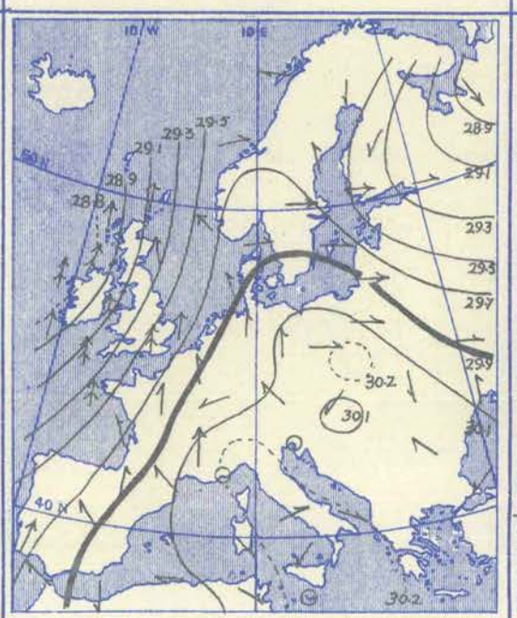
Barometer fallen generally, but risen in Scotland and Wales. Readings at 8 a.m. highest, 30·2 ins. to 30·3 ins. over south-eastern and southern Europe; lowest, 28·7 ins. and less in a depression over the north of Scandinavia. As low as 29·4 ins. off the west of Ireland. Scandinavian cyclonic system moving eastwards later, and a large and deep disturbance approaching our Islands from the Atlantic. Gradients becoming steep over the United Kingdom generally.

Wednesday, 25th March, 1903.

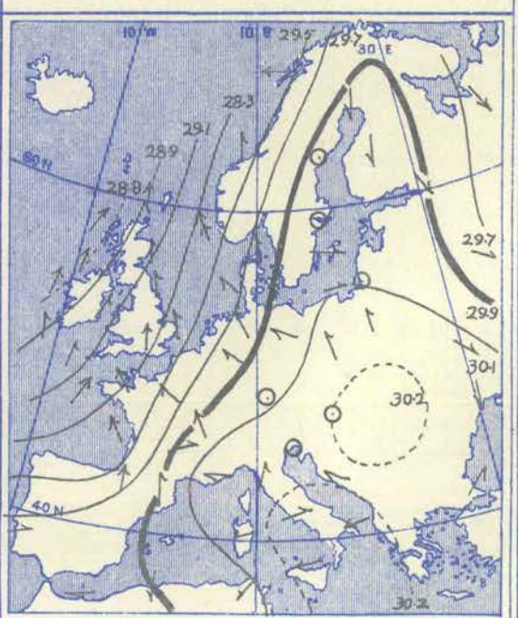
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in most southern regions as well as in many parts of Russia and Sweden; cloudy or dull in nearly all other localities, with rain at several stations in the United Kingdom, and snow at Kuopio. Rain falling later in the west and north of France, throughout our Islands, and in some Swedish localities. Thunderstorms occurring in London and at Scilly.

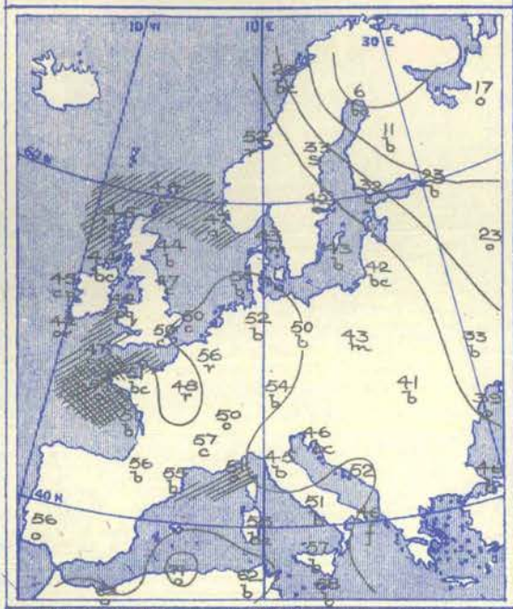
Temperature risen over France and the British Isles, fallen in most other countries. Ranging at 8 a.m. from 66° at Biarritz, 62° at Oran, and 60° at Lisbon, to 54° in London and at Lyons, to below 50° at Paris and over the whole of central and northern Europe, below 40° over Sweden and northern Russia, to 19° at Archangel, and to 8° at Haparanda. Rising quickly during day over France, the Netherlands, and the eastern half of England. Maximum in London, 67°; at Paris, 79°; at Biarritz and Algiers, 81°. Not touching 70° in Italy, and not much exceeding 50° on the south-west coast of England. The Paris maximum was the highest hitherto recorded in that city during March.

Wind in morning fresh or strong from the Southward over our Islands, France, and Spain (a gale on our western coasts), and drawing into West in the south of Norway and the Baltic. Northerly over the north of Finland and at Archangel. Light and variable over central and southern Europe. Not much change later, but force decreasing somewhat on our western coasts and increasing in the south-west of Norway.

Barometer risen quickly over Finland, Scandinavia, and Denmark, fallen over the United Kingdom, France, and Spain. Readings at 8 a.m. ranging from 30·2 ins. and upwards in an irregularly shaped anticyclone over Italy and Sicily, and in a smaller system near Cracow, to below 28·8 ins. (1) in a large and deep disturbance off our north-west coasts, and (2) in another depression to the eastward of Archangel. Western cyclonic disturbance moving north-north-eastwards and spreading eastwards later, but a secondary appearing over our south-west coasts. Barometer falling over the western half of Europe generally, rising quickly in the north-east.

Thursday, 26th March, 1903.

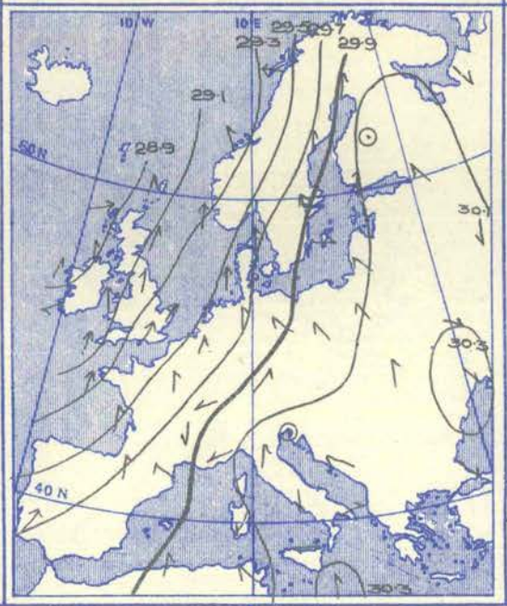
Temperature and Weather. — 8 a.m.

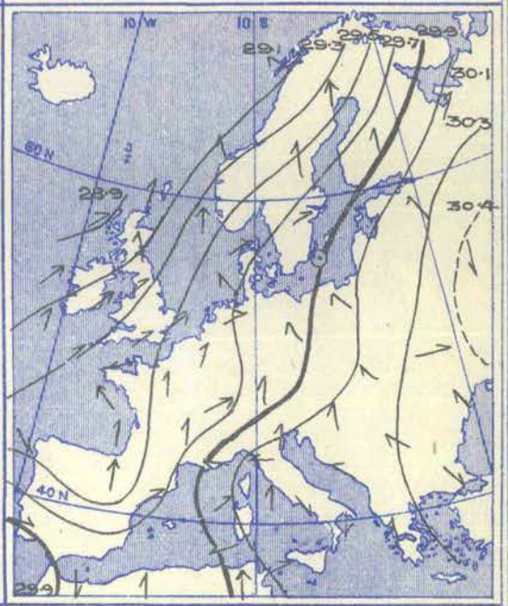


Weather in morning fine and bright at some German, Austrian, and extreme southern and south-eastern stations, but cloudy or dull over Europe as a whole. Rainy or showery in many parts of France, England, Ireland, and the west of Norway, and snow falling at Hernösand. Rain general over the United Kingdom, France, and the northern portions of Spain and Italy later, and rain or snow over Scandinavia. Largest amounts 0·9 in. at Nice, and 1·0 in. at Turin. Lightning observed in several parts of England, and a thunderstorm occurring at Dungeness.

Temperature risen over Scandinavia, Denmark, Germany, and Algeria, fallen generally elsewhere. Readings at 8 a.m. highest, 71° at Algiers, 58° at Malta and Barcelona, 57° at Lyons, and 56° at Brussels, Biarritz, and Lisbon. Lowest, 6° at Haparanda, 17° at Archangel, 23° at Moscow, 29° at Bodö, 42° at Parsonstown and Valencia (Ireland), 45° at Rome, and 46° at Trieste and Constantinople. Rising later to 58° in London, 59° at Jersey and Paris, to about 70° over central Europe, to 81° at Algiers, and to 88° at La Calle.

Barometer and Wind. — 8 a.m. and 6 p.m.



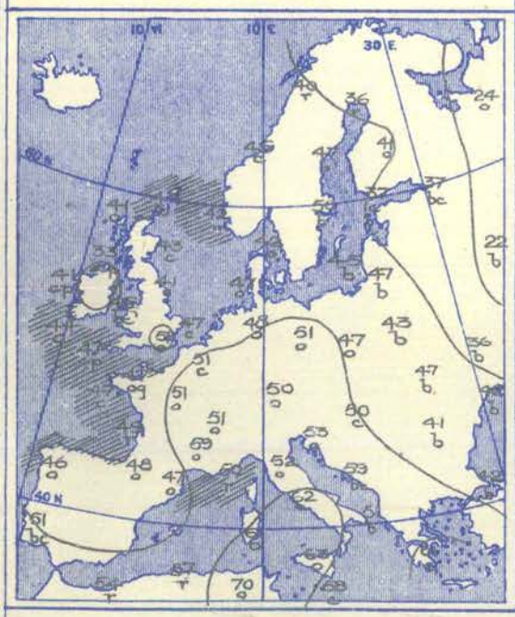


Wind in morning Southerly or South-Westerly over the greater part of western and north-western Europe, but variable in the south of Ireland, and Easterly at Bodö. Fresh or strong in force in most places, with a gale on the Welsh coast and in the south-west of Norway. Northerly or North-Easterly over the eastern and southern regions, but blowing a moderate gale from East at Cape Sicié, and from South at Aumale. Veering to West later over Spain and Portugal, and backing to South-East or East in Brittany. Gales in Wales and Norway subsiding.

Barometer risen over the eastern half of our area, fallen in the west (except on west coast of Ireland). Ranging at 8 a.m. from 30·2 ins. to 30·3 ins. and upwards in a large ridge extending from the Mediterranean, across Turkey, to central Finland, to nearly 29·0 ins. in a secondary disturbance off the south of Ireland, and to 28·9 ins. in a large system off our north-west coasts. High-pressure area moving eastwards during day, and barometer falling decidedly over northern countries. A new low pressure system forming over the Bay of Biscay.

Friday, 27th March, 1903.

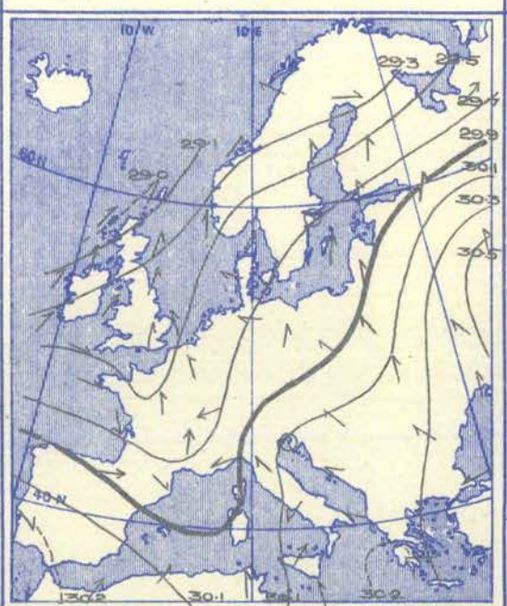
Temperature and Weather. — 8 a.m.

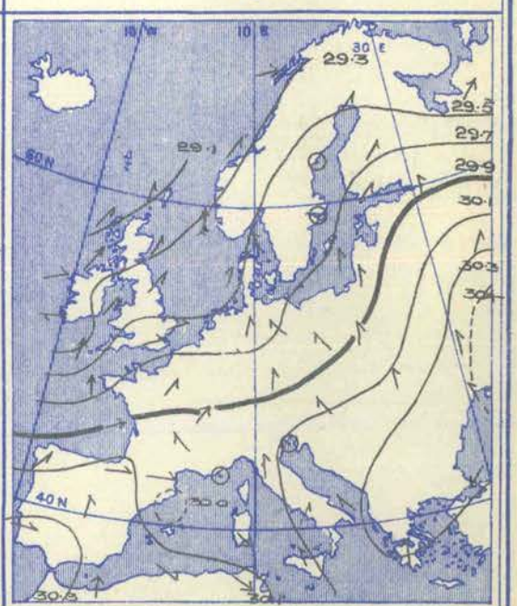


Weather in morning cloudy or very dull generally, with rain in different parts of Algeria and France, as well as at Bodö, and showers at several of our own stations. Fair over Russia and south-eastern Europe. Remaining fine all day over Russia, central Europe and Sweden, but rain falling in other regions—as much as 0·4 in. in the west of Ireland, 0·6 in. at Nice, 0·7 in. at Sanguinaires and La Calle, and 1·0 in. at Leghorn.

Temperature risen in most regions, but fallen over France, Spain, and western Algeria. Readings at 8 a.m. highest, 70° at La Calle, 62° at Rome, 61° at Athens, 60° at Leghorn, and 55° at Barcelona. Lowest, 22° at Moscow, 24° at Archangel, 37° at St. Petersburg, 39° at Parsonstown, 42° at Bath and Constantinople, 44° at Limoges, and 50° at Nice. Rising later to 54° in London, between 54° and 60° at many French stations, to about 70° over Greece and central Europe, to 77° at Tunis, and to 79° at Palermo. Maxima at Stockholm and Wisby 57° and 61° respectively.

Barometer and Wind. — 8 a.m. and 6 p.m.



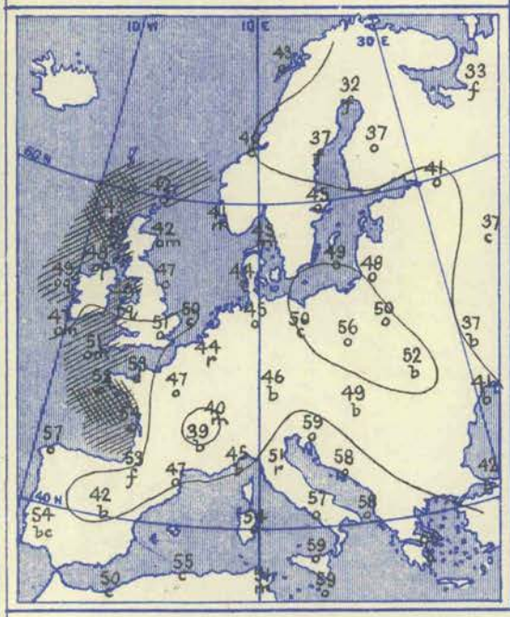


Wind in morning fresh or strong from West or North-West over our south-west coasts, the Bay of Biscay, and Spain, and from South over the east of France, the Netherlands, and our own eastern districts. Mainly South-Easterly over central and eastern Europe, and South-Westerly in the north. A fresh gale (from South) blowing at Skudesnaes. No great change as a whole later, but wind backing over our Islands and France—to South on the south-west coast of England, and to East at Valencia.

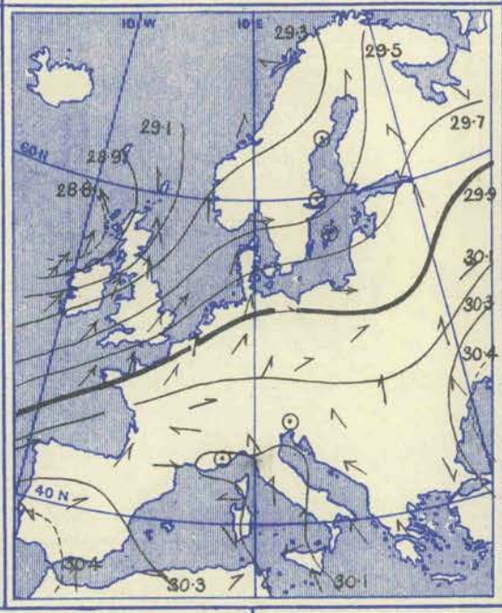
Barometer at 8 a.m. ranging from above 30·5 ins. over southern and central Russia, and 30·2 ins. and upwards over the south-west of the Iberian Peninsula, to 29·0 ins. and less in a depression off the north-west of Scotland. Relatively low in a V-shaped depression over France. Northern depression moving north-eastwards later, but another (smaller one) appearing off the south of Ireland by 6 p.m., and a large and deep system advancing quickly to our north-west coasts during the night.

Saturday, 28th March, 1903.

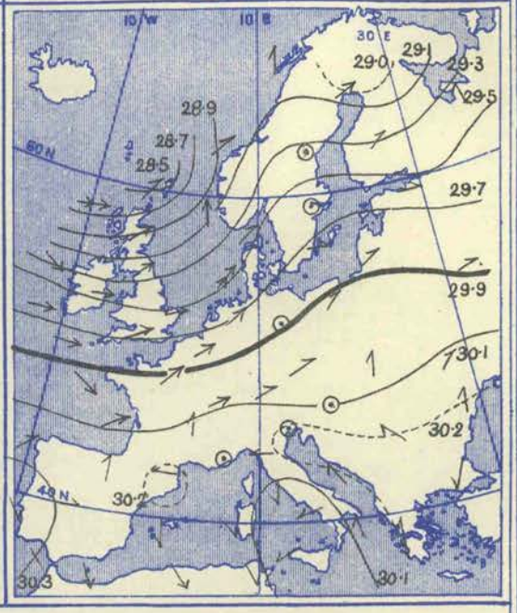
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over the greater part of our Islands and the Continent, with rain at many of our own western stations, as well as in the Netherlands and several parts of France and northern Italy. Fine over south-eastern Europe, and also over Algeria and the central and southern parts of Spain. Showers of hail or rain falling during day over the western countries generally, and lightning seen at night at Malin Head.

Temperature risen over our Islands and the west of France, and also over the eastern parts of Germany and Austria, fallen elsewhere. Morning readings highest, 60° at Rome and Athens, and 59° at Palermo and Malta; above 55° at most of the Mediterranean, Adriatic, and Spanish coast stations. Lowest, 31° at Kharkov, 32° at Haparanda, 33° at Archangel, and 35° at Uleaborg and Nicolaïeff. Rising during day to 55° and upwards in most parts of England, and to 58° at Yarmouth; exceeding 60° over southern and eastern Europe, and reaching 72° at Lemberg and Hermanstadt, and 73° at Palma.

Wind South-Westerly over western and northern Europe generally, and strong to a gale in force on our own western coasts, but drawing into South-East in Scotland and the extreme north of England. Variable in the south of France; Southerly or South-Easterly over Italy and the neighbouring parts of the Mediterranean. Subsequently increasing to a gale from the Westward over nearly the whole of our Islands, and from the Southward on the eastern shores of the North Sea.

Barometer highest, 30·4 ins. and upwards in an anticyclone over the south of Russia, and also in another system lying to the south-westward of the Spanish Peninsula. Lowest, 28·8 ins. and less in a deep cyclonic system with its centre lying to the westward of Scotland; gradients steep over nearly the whole of our Islands and France. Cyclonic system subsequently moving north-eastwards to the neighbourhood of the Shetlands, and barometer rising quickly on our western coasts.

IV.—GENERAL NOTES, etc.

During the earlier half of the week pressure was highest in an irregularly shaped anticyclone lying over Italy and its neighbourhood, while large and deep depressions having their centres beyond our western and northern coasts moved in a north-easterly direction to Scandinavia and northern Europe, their secondaries travelling in a similar direction over the United Kingdom. As the week progressed the high pressure area gradually moved eastwards, and extended northwards, the centres of the Atlantic cyclonic systems at the same time approaching nearer the United Kingdom. By the end of the week a shallow depression had become established over Italy, while a second anticyclone appeared over the Iberian Peninsula. The winds experienced over the more southern and eastern regions were mostly light and variable, but over the whole of the north-western half of Europe there was a fresh to strong current of Southerly to Westerly winds, which often increased to the force of a gale in different parts of our Islands and Scandinavia. The weather was very dry over the southern and south-eastern countries until towards the end of the period, when heavy falls of rain became rather general in Italy and its vicinity. Over the northern and north-western regions rain was of almost daily occurrence, the heaviest amounts being measured on our own western and north-western coasts. Temperature showed a distinct upward movement as a whole, although it was subject to many fluctuations. On Wednesday a rapid rise took place over France and the south and east of England, a maximum reading of 67° being registered in London, and values of 79° and 81° respectively at Paris and Biarritz.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from Observations made at 8 a.m. in the British Islands, Belgium, Holland and Spain; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands, Belgium and Spain; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 68.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	22·4	- 5·0	26	- 6	SHEFFIELD	26·6	—	31	—	WESTBOURNE	40·4†	+ 4·9	47†	+ 6
STRATHPEFFER SPA	18·9	- 5·2	21	- 6	WORKSOP	20·1	- 5·2	23	- 6	VENTNOR HOSPITAL	35·9	- 0·7	42	- 1
EDINBURGH	22·2	- 1·5	26	- 2	THURCASTON	23·9	- 1·7	27	- 2	BOURNEMOUTH	33·7	—	39	—
COCKLE PARK	23·0	—	26	—	TUNBRIDGE WELLS	46·6†	—	54†	—	MARLBOROUGH	22·9	- 4·4	27	- 5
NEWCASTLE-ON-TYNE	13·0	—	15	—	MARGATE	37·2	+ 6·4	43	+ 8	SOUTHPORT	16·6	—	19	—
YORK	16·1	- 10·3	19	- 12	BROADSTAIRS	39·9	—	46	—	RHYL	34·0	—	39	—
CROMER	45·0	—	52	—	RAMSGATE	—	—	—	—	ABERDOVEY	25·4†	—	29†	—
LOWESTOFT	41·6	—	48	—	EASTBOURNE	37·5	+ 3·2	44	+ 4	TENBY	22·5	-18·1	26	- 15
HOLLESLEY BAY	39·6	—	46	—	BRIGHTON	36·4	+ 2·8	42	+ 3	TORQUAY	32·2	- 3·0	37	- 4
DUNMOW	38·4	—	45	—	WORTHING	37·6	—	44	—	NEWQUAY	21·8	-12·4	25	- 15
					BOGNOR	43·7	—	51	—	GUERNSEY	48·0†	+10·3	56†	+ 12
					WATERGATE PARK	30·0	—	35	—					

† The values at Tunbridge Wells, Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 13.] *Third Series.* WEEK ENDING SATURDAY, APRIL 4TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 74.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	54	32	48·2	36·2	41·9	1 above	17	− 2	23	− 2	144	+ 26	356	− 83
	1. SCOTLAND, EAST	57	28	49·6	35·8	42·4	1 above	29	+ 4	17	− 9	199	+ 43	378	−114
	2. ENGLAND, N.E.	58	29	50·2	37·2	43·4	1 above	30	+ 6	13	− 8	292	+127	255	−163
	3. ENGLAND, EAST	57	31	52·1	39·4	45·6	2 above	35	+ 3	7	−15	351	+146	237	−223
	4. MIDLAND COUNTIES	56	28	51·3	37·9	44·3	1 above	33	− 1	11	−11	319	+ 93	260	−202
	5. ENGLAND, SOUTH	57	29	51·8	41·0	46·2	2 above	34	− 1	3	−12	355	+111	146	−205
Principal Grazing Districts.	6. SCOTLAND, WEST	55	33	49·8	38·2	43·7	1 above	28	+ 3	11	− 7	227	+ 56	222	−132
	7. ENGLAND, N.W.	58	30	50·0	39·3	44·4	1 above	28	+ 2	8	− 9	296	+115	194	−149
	8. ENGLAND, S.W.	57	30	51·5	41·1	46·1	1 above	32	− 1	3	−10	370	+104	112	−161
	9. IRELAND, NORTH	54	32	50·2	39·1	44·4	0 (average)	29	− 1	8	− 8	257	+ 20	236	− 68
	10. IRELAND, SOUTH	60	31	52·3	40·6	46·2	1 above	35	0	4	− 7	378	+ 63	133	− 91
	— CHANNEL ISLANDS	57	42	52·8	44·9	48·7	2 above	47	+ 9	0	− 4	488*	+136	36*	− 76

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 74.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	14	6 more	75	+15	24·8	+11·3	25	− 3	27	− 3	136	− 59	16	− 7
	1. SCOTLAND, EAST	5	6	1 more	60	+11	12·6	+ 5·4	29	+ 1	32	+ 1	181	− 50	20	− 6
	2. ENGLAND, N.E.	5	5	1 more	47	+ 1	5·2	− 0·1	25	− 3	28	− 4	205	− 43	23	− 5
	3. ENGLAND, EAST	6	9	6 more	44	− 3	4·7	− 0·3	28	− 6	31	− 6	270	+ 4	29	0
	4. MIDLAND COUNTIES	5	5	1 more	48	+ 4	7·3	+ 1·2	26	− 6	29	− 6	208	− 29	23	− 2
	5. ENGLAND, SOUTH	6	5	1 more	54	+10	6·9	+ 0·4	27	− 6	30	− 7	249	− 11	27	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	12	5 more	75	+22	22·8	+ 9·8	34	+ 4	37	+ 5	164	− 58	18	− 7
	7. ENGLAND, N.W.	7	10	5 more	63	+14	11·8	+ 4·2	28	+ 1	31	+ 1	201	− 23	22	− 3
	8. ENGLAND, S.W.	6	4	1 less	64	+13	12·3	+ 2·6	25	−10	28	−11	216	− 68	23	− 7
	9. IRELAND, NORTH	7	9	4 more	74	+16	14·3	+ 6·1	26	− 3	29	− 3	195	− 35	22	− 4
	10. IRELAND, SOUTH	6	7	1 more	70	+16	15·5	+ 5·2	24	− 8	27	− 9	201	− 65	22	− 7
	— CHANNEL ISLANDS	6	4	1 less	66	+11	8·8	+ 0·7	34	− 6	37	− 6	288	− 34	31	− 4

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period was again extremely unsettled and rain frequent. The falls were, however, less heavy, as a rule, than those experienced during the weeks immediately preceding. Thunder and lightning occurred in the north of Ireland on Sunday evening, and at some stations in the north of England on Monday, and lightning only in some eastern localities.

Temperature was much lower over Great Britain than during the previous week, but was still a little above the mean in all districts except Ireland N. The highest of the maxima were recorded on rather irregular dates. In Ireland S. the thermometer rose to 60°, but elsewhere the maxima ranged from 58° in England N.E. and N.W., to 54° in Scotland N., and Ireland N. The lowest of the minima were registered, as a general rule, during the latter half of week, and varied from 28° in Scotland E. and the Midland Counties, to 33° in Scotland W., and to 42° in the Channel Islands.

Rainfall exceeded the normal amount over the Kingdom generally, especially in the north and north-west and over the east of England. In England S.W. and the Channel Islands, however, the fall was rather less than the mean.

Bright Sunshine was deficient in all districts excepting Scotland E., Scotland W., and England N.W., where there was a slight excess. The percentage of the possible duration ranged from 37 in the Channel Islands and Scotland W., to 28 in England N.E. and S.W., and to 27 in Scotland N. and Ireland S.

Barometer and Wind.—Cyclonic disturbances were again very numerous over our Islands and their neighbourhood, while the barometer was highest over the Bay of Biscay and the adjacent portions of France and Spain. The centres of the main disturbances remained outside our western and northern coasts, and moved, as a rule, north-eastwards or eastwards, but about the middle of the week, when pressure had become relatively high in the north of Scandinavia, a system travelled south-eastwards over the North Sea. In the rear of this disturbance the wind veered to North-West or North, but taking the period as a whole it was between South and South-West or West. Strong winds or gales were very prevalent during the earlier days, but later on the depressions were less deep and the winds less strong.

207 | 90 Wy & S. Ltd.
310 | 70 12 | 02

II.—DATA from which the SUMMARY on page 73 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	47	35	45·4	38·3	41·7	+ 1·9	10	14	6	1·20	+ 0·64	*	*	*	*
	Stornoway	52	35	48·1	37·1	42·3	+ 1·9	23	14	7	1·12	+ 0·45	31·8	+ 1·4	35	+ 2
	Wick	50	34	47·4	35·6	41·2	− 0·1	15	24	5	0·46	+ 0·03	*	*	*	*
	Lairg ℌ	54	33	51·0	34·3	42·3	+ 2·6	34	22	7	0·74	+ 0·10	*	*	*	*
	Glencarron ℌ	49	32	47·4	34·7	40·8	+ 0·4	15	28	6	2·32	+ 1·05	*	*	*	*
	Fort Augustus ℌ	53	32	49·3	34·8	41·7	− 0·3	20	28	7	1·44	+ 0·85	22·0	− 0·5	24	− 1
	Fort William	51	36	48·7	38·3	43·3	+ 0·6	25	10	7	2·30	+ 1·22	14·8	− 12·6	16	− 14
1. SCOTLAND, E.	Nairn	55	33	51·1	34·7	42·5	+ 0·5	34	20	7	0·52	+ 0·17	*	*	*	*
	Aberdeen	51	34	48·4	37·1	42·5	+ 0·4	24	14	4	0·57	+ 0·08	36·1	+ 4·5	40	+ 5
	Braemar ℌ	49	28	46·1	33·0	39·2	− 0·7	11	32	6	0·64	+ 0·10	*	*	*	*
	Ochtertyre ℌ	55	32	51·1	35·6	43·0	+ 0·8	34	18	6	0·67	+ 0·12	*	*	*	*
	Leith	57	35	52·6	37·9	44·9	+ 1·8	38	11	5	0·38	+ 0·06	*	*	*	*
	Marchmont ℌ	52	33	48·3	36·4	42·1	+ 1·1	24	16	4	0·51	− 0·02	31·0	+ 2·5	34	+ 3
2. ENGLAND, N.E.	Alnwick Castle	56	29	50·1	36·7	43·1	+ 1·7	30	15	5	0·49	0·00	*	*	*	*
	Durham	58	29	49·9	35·1	42·1	+ 0·2	30	19	4	0·18	− 0·26	27·3	− 0·3	30	0
	Shields	52	32	50·1	37·9	43·7	+ 1·5	29	11	5	0·31	− 0·07	*	*	*	*
	Scarborough ℳ	53	32	50·0	36·4	42·9	+ 0·2	30	16	6	0·42	+ 0·02	22·5	—	25	—
	Spurn Head	53	37	50·0	39·3	44·4	+ 1·7	28	8	6	0·80	+ 0·52	*	*	*	*
	Fulbeck (Lincolnshire)	54	32	50·8	37·8	44·0	+ 1·0	32	12	5	0·68	+ 0·33	23·3	—	26	—
3. ENGLAND, E.	Hillington ℳ	56	31	52·0	37·6	44·5	+ 0·9	36	12	6	1·28	+ 0·91	25·8	− 5·6	29	− 6
	Yarmouth	56	37	50·9	39·0	44·7	+ 2·3	32	8	6	1·19	+ 0·80	*	*	*	*
	Geldeston	55	36	52·6	39·4	45·7	+ 2·2	37	7	6	0·90	+ 0·55	29·3	− 4·3	33	− 5
	Cambridge	57	32	53·9	37·7	45·4	+ 1·2	42	12	6	0·83	+ 0·50	27·4	− 5·4	30	− 6
	Felixstowe	56	37	51·5	42·5	46·8	+ 3·0	34	0	6	0·87	—	32·8†	—	36†	—
	Rothamsted	53	32	51·3	38·3	44·5	+ 1·2	33	19	5	0·58	+ 0·16	23·7	− 7·4	26	− 8
	Shoeburyness	56	37	52·3	41·6	46·7	+ 2·2	35	1	6	0·80	+ 0·52	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	55	32	49·7	36·7	42·9	+ 1·4	29	15	4	0·59	+ 0·11	34·4	—	38	—
	Bawtry (Hesley Hall)	55	32	51·7	36·3	43·6	+ 0·1	35	16	4	0·45	+ 0·08	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	54	32	51·4	38·3	44·5	+ 0·6	33	10	5	0·45	+ 0·10	*	*	*	*
	Cheadle ℳ	53	36	49·2	38·2	43·4	+ 1·0	26	11	6	0·74	+ 0·27	*	*	*	*
	Birmingham (Edgbaston)	52	33	50·1	38·5	44·0	+ 0·9	29	10	5	0·67	+ 0·28	20·8	—	23	—
	Churchstoke ℳ	56	31	51·9	38·0	44·6	+ 2·4	35	11	7	0·65	+ 0·22	25·0	− 5·6	28	− 6
	Hereford ℳ	56	31	53·3	38·7	45·7	+ 1·6	40	9	4	0·28	− 0·08	*	*	*	*
	Cirencester	53	28	51·9	37·0	44·1	+ 1·4	36	14	6	0·55	+ 0·13	23·3	− 8·4	26	− 9
	Oxford	54	32	52·3	39·3	45·5	+ 0·9	36	8	5	0·30	− 0·05	24·9	− 5·9	28	− 7
5. ENGLAND, S.	London	57	39	52·6	40·7	46·4	+ 1·2	36	4	6	0·74	+ 0·38	17·3‡	− 7·4‡	19‡	− 8‡
	Swarraton (Alresford) ℳ	54	29	51·7	38·8	44·9	+ 2·0	34	9	5	0·47	+ 0·02	*	*	*	*
	Dungeness	55	39	51·1	42·6	46·7	+ 2·9	33	0	6	0·75	+ 0·43	29·9	—	33	—
	Hastings (St. Leonards)	53	39	50·8	41·8	46·1	+ 1·8	30	1	6	0·50	+ 0·06	27·2	− 9·1	30	− 10
	Southampton	56	34	54·5	41·7	47·8	+ 2·1	42	1	6	0·29	− 0·14	29·9	− 4·6	33	− 5
	Portland Bill	53	38	50·9	43·1	46·8	+ 0·8	34	0	6	0·14	—	*	*	*	*
	Shaftesbury ℳ	53	34	51·2	38·6	44·6	+ 1·2	32	10	6	0·44	− 0·08	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	34	50·5	38·8	44·4	+ 0·9	30	9	7	1·92	+ 0·82	*	*	*	*
	Glasgow	53	36	48·9	37·8	43·1	+ 0·6	25	12	7	1·02	+ 0·51	32·9	+ 8·0	37	+ 9
	Cally ℌ	54	33	50·0	37·5	43·5	+ 0·4	29	13	7	0·98	+ 0·31	*	*	*	*
	Aspatria	55	35	49·5	37·6	43·3	+ 0·9	28	12	5	1·03	—	30·5	—	34	—
	Douglas (Isle of Man)	53	34	50·0	39·2	44·3	+ 0·9	28	8	7	0·98	+ 0·40	37·1	+ 0·5	41	+ 1
7. ENGLAND N.W.	Newton Reigny	53	30	48·7	36·6	42·4	+ 1·1	25	15	7	1·19	—	27·0	—	30	—
	Stonyhurst	52	34	48·5	38·9	43·5	+ 0·8	24	9	7	1·65	+ 1·00	30·6	+ 1·1	34	+ 1
	Blackpool ℳ	51	38	49·3	39·5	44·2	+ 0·8	26	7	7	0·85	+ 0·42	35·4	+ 5·8	39	+ 6
	Manchester (Prestwich)	53	34	49·8	37·0	43·1	− 0·2	29	14	6	1·04	+ 0·55	23·6	—	26	—
	Liverpool Obsy. (Bidston)	53	39	50·0	40·9	45·2	+ 1·0	27	3	6	0·60	+ 0·23	23·6	—	26	—
	Chester (Hawarden Bridge)	58	34	53·1	39·1	45·8	+ 0·7	39	8	5	0·39	—	*	*	*	*
	Llandudno ℳ	52	40	50·7	41·0	45·6	+ 0·6	29	3	7	0·90	+ 0·50	25·1	− 5·4	28	− 6
	Holyhead	51	40	49·6	41·7	45·5	+ 0·6	26	1	7	1·08	+ 0·62	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	50	41	49·1	43·3	46·1	+ 1·6	29	0	6	0·27	− 0·19	26·2	− 10·4	29	− 12
	Clifton	54	35	51·9	41·9	46·7	+ 2·2	33	0	5	0·43	− 0·07	*	*	*	*
	Bath	55	30	52·9	39·7	46·0	+ 1·3	38	6	6	0·39	− 0·05	20·1	—	22	—
	Arlington (N. Devon)	51	35	49·3	38·7	43·8	+ 0·9	26	9	7	0·93	+ 0·21	*	*	*	*
	Cullompton ℳ	57	32	53·9	39·3	46·3	+ 0·9	41	8	5	0·41	− 0·14	29·6	− 2·9	33	− 3
	Falmouth	54	42	51·5	43·5	47·3	+ 1·3	37	0	6	0·32	− 0·37	26·5	− 11·0	29	− 12
	Plymouth	54	38	52·2	41·6	46·7	+ 0·6	35	1	7	0·25	− 0·30	24·2	− 11·5	27	− 13
9. IRELAND, N.	Malin Head	50	37	47·9	39·7	43·6	− 0·6	21	6	7	1·14	+ 0·69	*	*	*	*
	Edenfel (Omagh)	52	32	49·0	38·0	43·2	+ 0·5	25	11	6	1·15	+ 0·61	*	*	*	*
	Blacksod Point	50	37	49·6	41·4	45·3	− 0·2	26	2	7	0·99	+ 0·27	*	*	*	*
	Markree Castle	53	33	51·1	38·7	44·6	+ 0·7	32	9	7	1·00	+ 0·41	19·0	− 10·3	21	− 12
	Armagh	54	33	52·5	38·6	45·2	+ 2·0	37	10	6	0·52	+ 0·05	32·8	+ 4·3	36	+ 5
	Donaghadee	54	35	50·9	38·1	44·2	+ 0·2	32	11	7	0·55	+ 0·12	*	*	*	*
10. IRELAND, S.	Dublin	57	35	53·3	40·5	46·6	+ 1·0	39	4	7	0·35	− 0·09	31·0	− 2·3	34	− 3
	Birr Castle	54	31	51·4	38·3	44·5	+ 0·5	33	10	6	0·49	− 0·01	32·2	+ 1·7	36	+ 2
	Kilkenny	60	32	53·4	39·9	46·3	+ 1·2	39	6	6	0·39	− 0·11	*	*	*	*
	Waterford	55	35	52·4	39·9	45·9	+ 1·4	36	6	5	0·37	− 0·23	*	*	*	*
	Roche's Point	54	37	52·1	41·6	46·6	+ 0·4	34	1	5	0·37	− 0·36	*	*	*	*
	Valencia	53	39	51·6	43·4	47·3	+ 0·4	37	0	7	0·83	− 0·05	10·0	− 24·4	11	− 27
	Killarney	54	34	52·6	41·4	46·7	+ 0·9	35	2	7	1·69	+ 0·87	*	*	*	*
	Foynes	56	35	51·8	40·1	45·7	+ 0·4	34	5	4	1·08	+ 0·51	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	42	52·4	44·7	48·4	+ 1·2	45	0	5	0·23	− 0·27	34·8	− 2·4	39	− 3
	Jersey	57	43	53·1	45·0	48·9	+ 1·9	48	0	6	0·46	− 0·01	31·4	− 8·9	35	− 11

Stations Marked ℳ are in connection with the Royal Meteorological Society, and those marked ℌ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

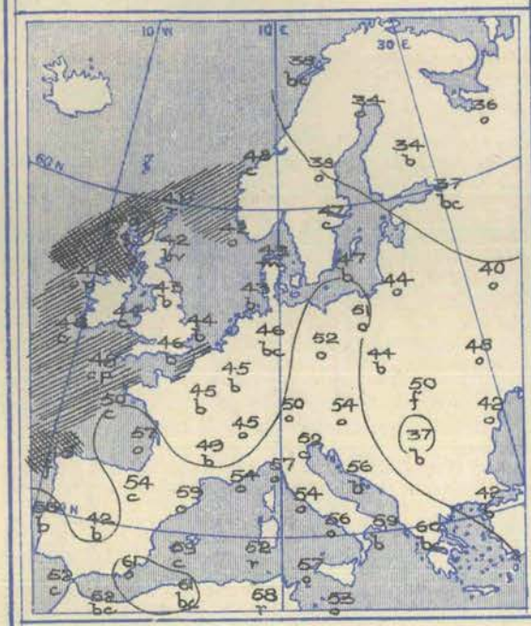
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

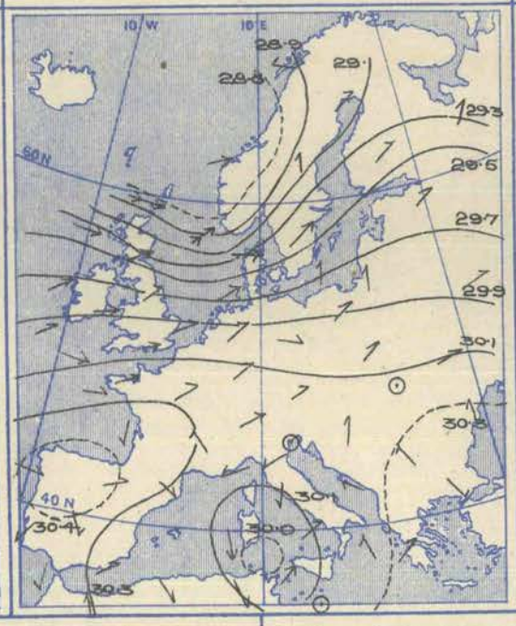
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 29th March, 1903.

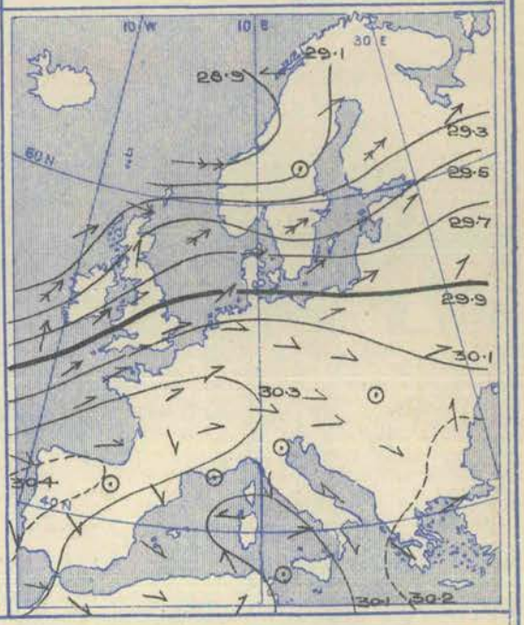
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull in most regions, but fine and bright at the majority of stations in Greece, France, the Netherlands, and the United Kingdom. Showery in the north of Ireland and rainy in the Shetlands, and also at Cagliari and La Calle. Rain becoming general over our Islands later; considerable falls experienced at Christiansund, La Calle, and Tunis, and slighter falls at Rome and Naples. A sharp thunderstorm occurring in evening over the north of Ireland.

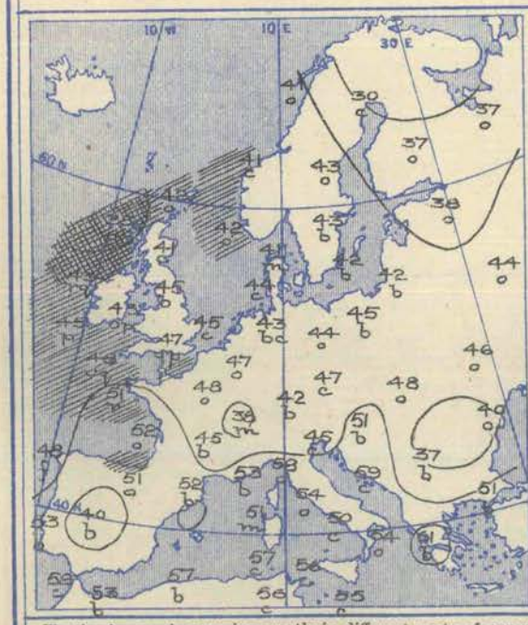
Temperature risen in most Mediterranean districts, fallen elsewhere. Ranging at 8 a.m. from 61° at Algiers, 60° at Athens, 59° at Barcelona and Brindisi, to below 50° over the northern half of Europe, and to below 40° over the northern parts of Scandinavia and Russia. Lowest reading of all, 34° at Haparanda and Kuopio. No higher than 36° at Wick and Hermanstadt. Maxima during day as high as 75° at Patras, 73° at Hermanstadt, about 70° at Buda-Pesth and at some stations in Spain and the extreme south of France. Highest reading in Germany, 61° at Breslau; and in our Islands, 57° in London and at Jersey.

Wind in morning showing a partial cyclonic circulation over north-western Europe, the Westerly current in our Islands and that from South-West and South over Denmark and Scandinavia being generally strong in force and blowing a fresh to whole gale at Malin Head, Sumburgh Head, and Skudesnaes. A complete circulation of fresh or strong winds shown around the Tyrrhennian Sea. Light anticyclonic airs prevailing both over south-western and south-eastern Europe. Wind backing to South or South-West over our western districts later and increasing in force, a strong Westerly gale setting in on the west coast of Norway.

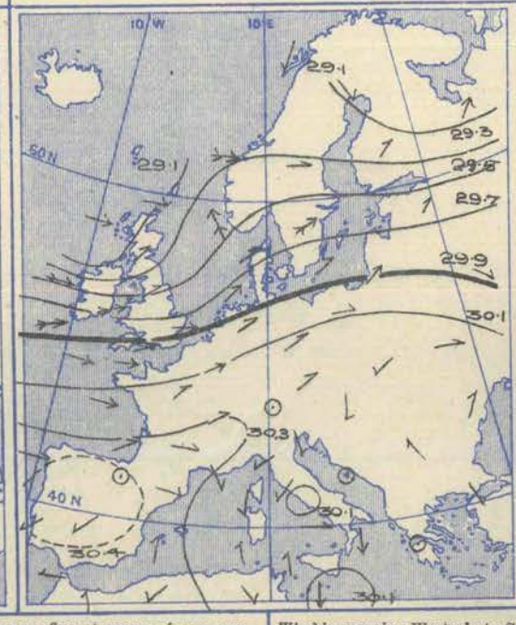
Barometer at 8 a.m. ranging from 30·4 ins. in an anticyclone over the north of Spain, and above 30·2 ins. over south-eastern Europe, to less than 30·0 ins. in a disturbance between Sardinia and Sicily, and to about 28·7 ins. in a large and deep depression off the west of Norway. Latter system moving north-eastwards later, and another disturbance approaching our north-west coasts quickly from the Atlantic. Southern low-pressure system partially dispersing.

Monday, 30th March, 1903.

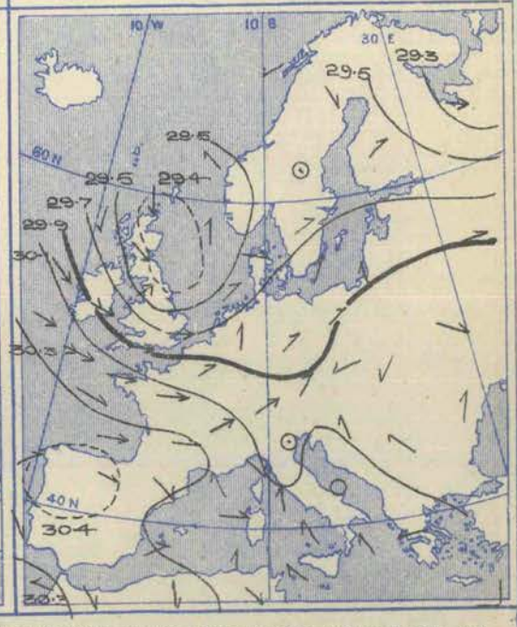
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning varying greatly in different parts of our area; fine at many of our own stations, over the Baltic, in the Riveria, Greece, and Algeria. Rain falling on our extreme south, west, and north-west coasts, and in the north of Holland, and fog prevailing at Corunna and Oporto. Rain later in nearly every British and Irish locality, in several parts of France, the Netherlands, and central Europe, and some rain or snow in the far north.

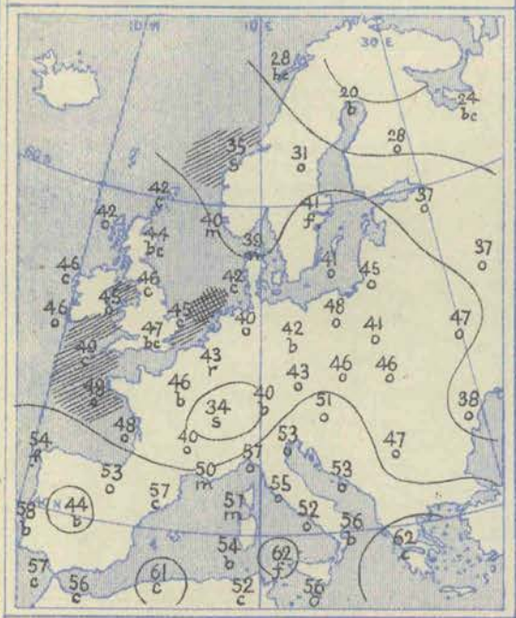
Temperature at 8 a.m. highest, 61° at Patras and Barcelona, 59° at Lésina, 58° at San Fernando and Florence, and 53° at Nice. Lowest, 30° at Haparanda, 37° at Hermanstadt, 38° at Belfort, over the Gulf of Finland, and at Nairn and Stornoway, and 40° at Madrid. Maximum readings during day, 59° at Munich, 66° at Perpignan and Lisbon, 68° at Hermanstadt and Florence, 70° at Madrid, Palma and Patras, and 75° at San Fernando. Thermometer not touching 50° at our northern and north-western stations, and not exceeding 52° even on our south coast.

Wind in morning Westerly to South-Westerly over the United Kingdom and its vicinity, and drawing into South-South-East in the south-west of Norway. Fresh or strong generally; Westerly wind blowing a gale on our west coasts. Strong winds or gales from between West and South-West over Finland and the greater part of Scandinavia. Light to fresh and irregularly cyclonic over Italy and the adjacent Islands, and light and anticyclonic over the Iberian Peninsula. Veering towards North-West over our Islands later, and gales extending Eastwards. Decreasing in force and backing to South or South-East over Scandinavia.

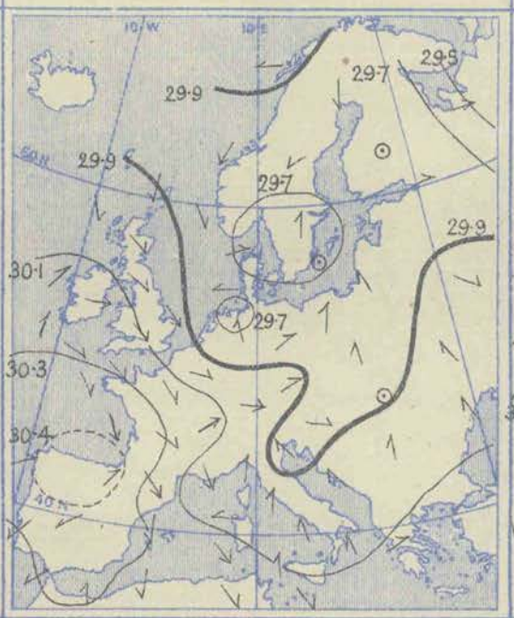
Barometer at 8 a.m. ranging from 30·4 ins. and upwards in an anticyclone over Spain and Portugal to less than 30·2 ins. in an irregularly shaped area over Italy and its neighbourhood, and to below 30·1 ins. (1) in a depression travelling away over Lapland, and (2) in another system off the north-west of Scotland. Last mentioned disturbance moving east-south-eastwards to the North Sea during day; barometer falling decidedly over central Europe, rising quickly on our west and north-west coasts.

Tuesday, 31st March, 1903.

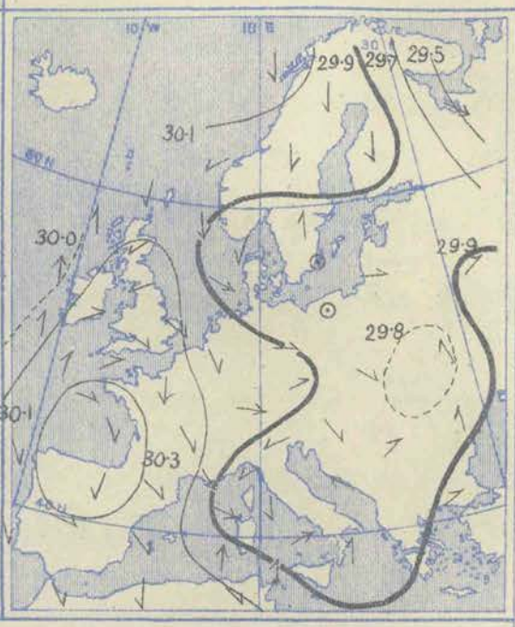
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull very generally, but fine at some of our own stations and in the extreme north of Europe. Rain falling at Brussels, snow at Belfort, and fog prevailing at Corunna and Palermo. Rain later in most parts of the United Kingdom, Sweden, Germany, the east of France, on the shores of the Adriatic, and at Florence, and rain or snow at a few Russian stations. Largest amounts, 0·7 in. at Stockholm, and 1·0 in. at Florence.

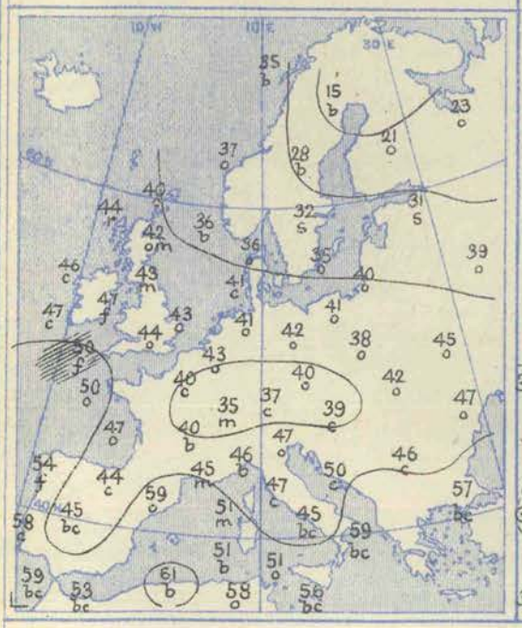
Temperature risen in Scotland and in most southern regions, fallen generally elsewhere. Readings at 8 a.m. highest, 62° at Patras and Palermo, 61° at Algiers, 58° at Lisbon and Palma, and 57° at Leghorn. Lowest, 20° at Haparanda, 24° at Archangel, 34° at Belfort, 35° at Nicolaieff, 41° at Parsonstown and Frankfürt, and 44° at Le Mans and Madrid. Rising during day to 57° at Leith, 56° at Biarritz, 66° at Hermanstadt, 68° at several stations on the shores of the Mediterranean, 72° at Oran, 73° at Lisbon, and 75° at Oporto and San Fernando. Thermometer not exceeding 45° at Munich and Frankfürt.

Wind at 8 a.m. showing two cyclonic circulations around the north-west of Germany and the south of Sweden, the North-Westerly current over Great Britain being fresh or strong in force. Light from the Southward in the west of Ireland. Light and anticyclonic over both the south-west and south-east of Europe, but light and cyclonic over Italy. Southerly winds in Ireland increasing in strength and extending eastwards later, and North-Westerly wind increasing to a moderate gale in the Riviera and the north of Italy.

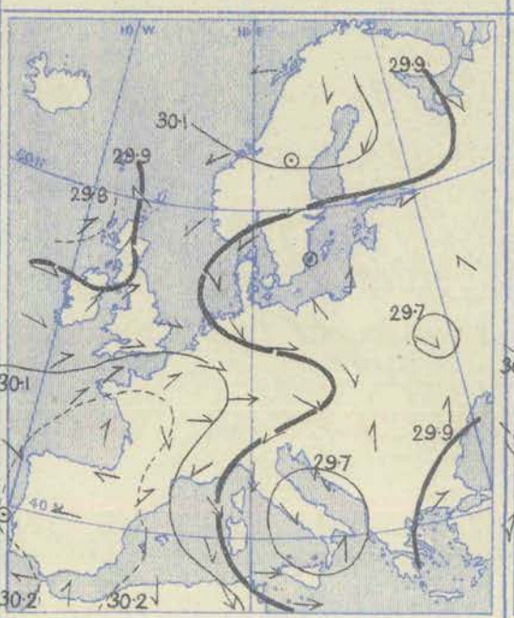
Barometer risen over our Islands and northern Europe, fallen elsewhere. Highest in morning, 30·4 ins. and upwards over the southern portion of the Bay of Biscay. Lowest, 29·6 ins. and less near Archangel, and as low as 29·7 ins. or less in two other minima lying respectively over the south of Sweden and near the mouth of the Elbe. Relatively low over the Gulf of Genoa. High and low-pressure systems all moving eastwards later, and a fresh disturbance approaching Ireland.

Wednesday, 1st April, 1903.

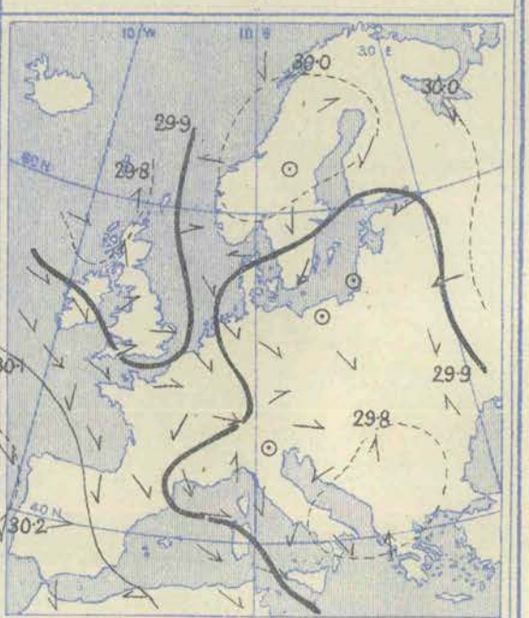
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in the north of Scandinavia, Algeria, and the Riviera; cloudy or dull in most other regions, with fog at Corunna and Oporto, rain in the west and north of our Islands and at Pesaro, and snow at Stockholm and over the Gulf of Finland. Rain becoming general later over the United Kingdom, France, Germany, and Austria, and as much as 1·0 in. falling at Brindisi.

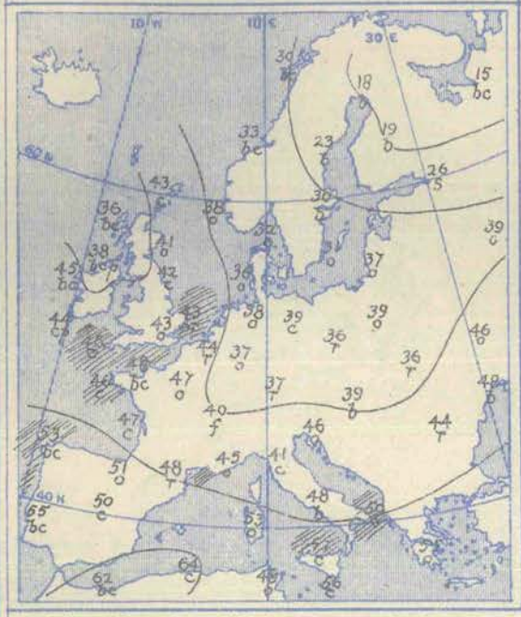
Temperature fallen in most places, but risen in Algeria and the south of Russia. Readings at 8 a.m. highest, 61° at Algiers, 59° at Oporto, San Fernando, Palma, and Brindisi. Lowest, 15° at Haparanda, 23° at Archangel, 30° at Hangö and Karlstad, 35° at Bodö and Belfort, 40° at Le Mans and Limoges, and 42° at Florence. Rising later to 63° at Biarritz, Nice, and Brindisi, 72° at Perpignan, Nemours, and Oran, and to 77° at Madrid. Maxima not exceeding 50° over Germany, and remaining below it at many of our own stations.

Wind in morning light and anticyclone over the extreme north and south-west of Europe, cyclonic, but of no great force elsewhere. A complete circulation shown around southern Italy, the Westerly wind at Palermo and Malta being strong. No great change as a whole later, but wind veering from West or South-West to North-West over Ireland, Wales, and the south-west of England.

Barometer fallen generally, but risen over Germany, Scandinavia, and the north of Russia. 8 a.m. readings ranging from 30·2 ins. and upwards in an anticyclone over the Spanish Peninsula and a good part of France, and above 30·1 ins. in another system in the extreme north, to less than 29·8 ins. in a depression off our north-west coasts, and to below 29·7 ins. (1) in a small minimum near Kieff, and (2) in a well-defined disturbance over the south of Italy and the Adriatic. Northern high-pressure giving way later, and shallow depressions moving eastwards over our Islands. Italian disturbance moving slowly eastwards.

Thursday, 2nd April, 1903.

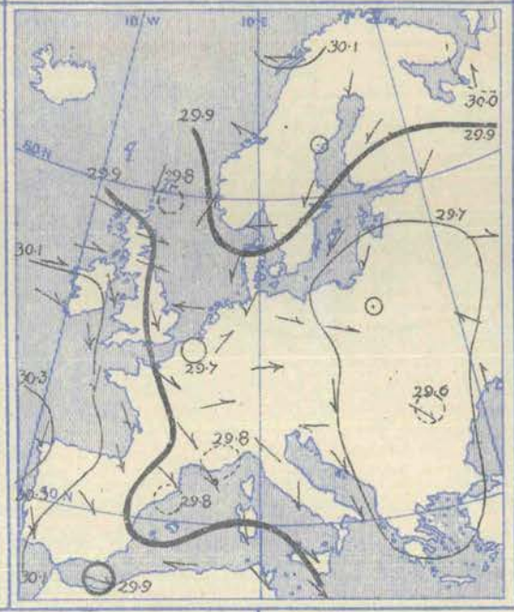
Temperature and Weather. 8 a.m.

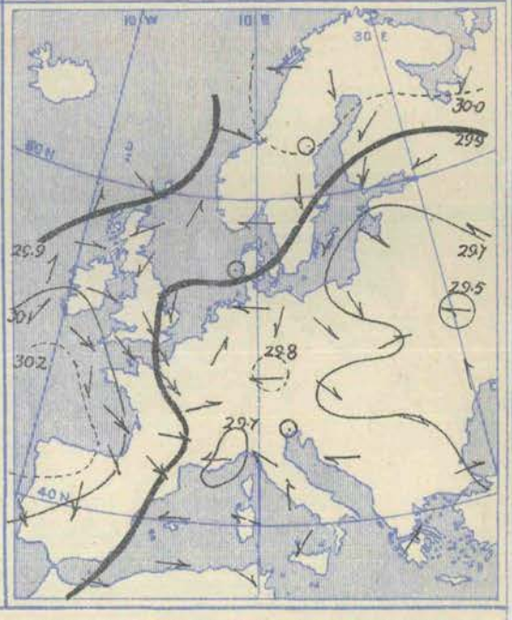


Weather at 8 a.m. fine and bright at most stations in Scandinavia, and also at several of those in our own western districts and in the west of Spain and Portugal. Cloudy or overcast in almost all other regions, with rain in different parts of England, France, the Netherlands, Germany, Hungary, and Transylvania, and snow at Prague and St. Petersburg. Rain falling very generally later over the United Kingdom and most of the central and southern parts of the Continent—largest amounts 0·6 in. at Rome and 0·7 in. at Barcelona.

Temperature changed irregularly, but fallen as a whole. Readings at 8 a.m. highest, 64° at Algiers, 57° at Malta, 55° at Lisbon, Barcelona, and Athens. Lowest, 15° at Archangel, 18° at Haparanda, 27° at Karlstad, 35° at Copenhagen and Frankfort, a little below 40° at some of our own extreme northern stations and, over central Europe, and 41° at Florence. Subsequently rising to 79° at Oran, 77° at Nemours and Algiers, 68° at Palma, 66° at San Fernando, 62° at Rome, and 59° at Nice. Remaining below 50° in most parts of our Islands and central Europe.

Barometer and Wind. 8 a.m. and 6 p.m.



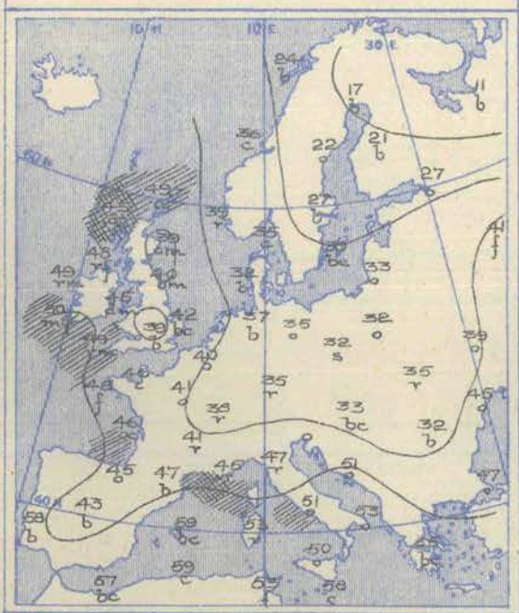


Wind in morning showing three separate cyclonic circulations—one around the Netherlands, another over the Riviera and its vicinity, and the third over eastern Europe. Very little force as a whole, but North-Westerly and Northerly winds rather strong on our west coasts, as well as at Lisbon and Palermo. No very important change later except on our extreme west coasts, where wind becoming Southerly again.

Barometer at 8 a.m. ranging from above 30·3 ins. in the north-west of Spain, and 30·1 ins. at Bodö, to 29·8 ins. and less in a depression over the south-east of France, to 29·7 ins. and less (1) in a small system over Belgium, and (2) in a large shallow area stretching from the Gulf of Riga to Turkey. Some other small cyclonic disturbances existing in different localities—notably near the Shetlands and Nemours. Cyclonic systems moving eastwards or dispersing during day, but another disturbance approaching Ireland.

Friday, 3rd April, 1903.

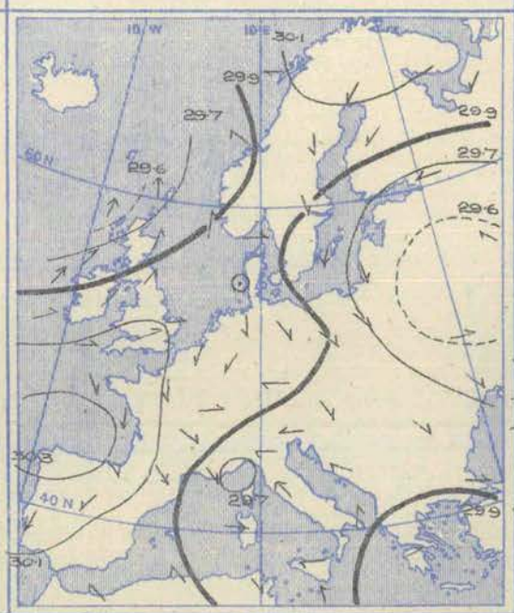
Temperature and Weather. 8 a.m.

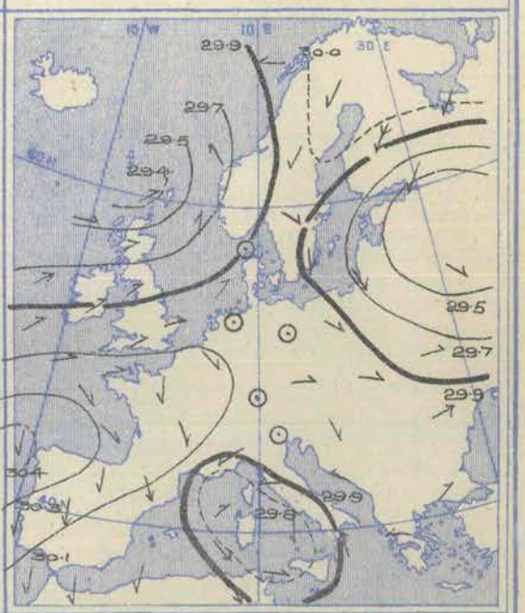


Weather in morning fine and bright over the Iberian Peninsula, at several of our own southern stations, and in the extreme north of Europe, but cloudy or dull generally. Rainy over the west and north of our Islands, in many French and Italian localities, and also at Munich and Lemberg. Snow falling at Breslau, Helsingsfors, and Karlstad. Rain falling later throughout the United Kingdom, in different parts of Scandinavia and Finland, in isolated parts of France, over Italy and the Adriatic, and at Tunis.

Temperature fallen generally, but risen over Italy, Ireland, and Scotland. Readings at 8 a.m. highest, 59° at Algiers and Palma, 58° at Lisbon, Oporto, and Malta, 56° at Barcelona, 55° at Athens, and 50° in the south of Ireland. Lowest, 11° at Archangel, 17° at Haparanda, 30° at Wisby, 32° at Warsaw and Hermanstadt, 39° at Aberdeen and Le Mans, 43° at Madrid, 44° at Aunale, and 45° at Nice. Rising during day to 55° in London and at Nairn, 57° at Nice, to about 60° or slightly higher over the south of Italy, at Trieste, and in Greece, to 70° at Nemours and Lisbon, and to 72° at San Fernando.

Barometer and Wind. 8 a.m. and 6 p.m.



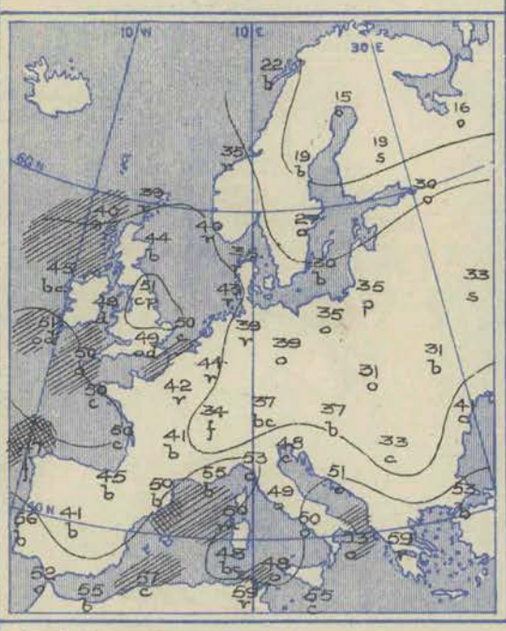


Wind in morning light and anticyclonic both over northern and south-western Europe; cyclonic elsewhere. A complete circulation of light to fresh winds prevailing around the Gulf of Genoa, a feeble movement over Russia, and fresh or strong South-Westerly winds over our own western and northern coasts. Little change as a whole later, either in direction or force, but North-Easterly wind increasing to a gale at Kuopio.

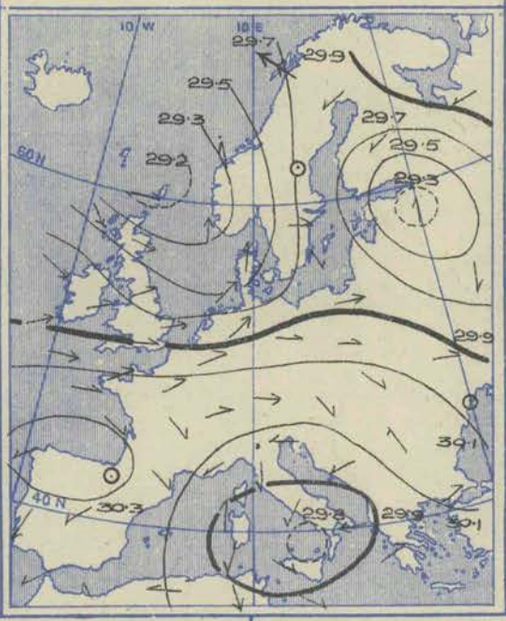
Barometer risen in most countries, but fallen in Ireland, Scotland, Russia, and Italy. Ranging at 8 a.m. from 30·3 ins. in an anticyclone over the north of Spain and the adjacent part of the Ocean, and above 30·10 ins. in the far north, and to below 29·7 ins. in a well-defined depression over the Gulf of Genoa, to 29·6 ins. and less in another system over our north-west coasts, and also in a large shallow disturbance over Russia. Russian depression growing much deeper during day, and that off our north-west coasts moving north-eastward. Barometer falling in extreme north.

Saturday, 4th April, 1903.

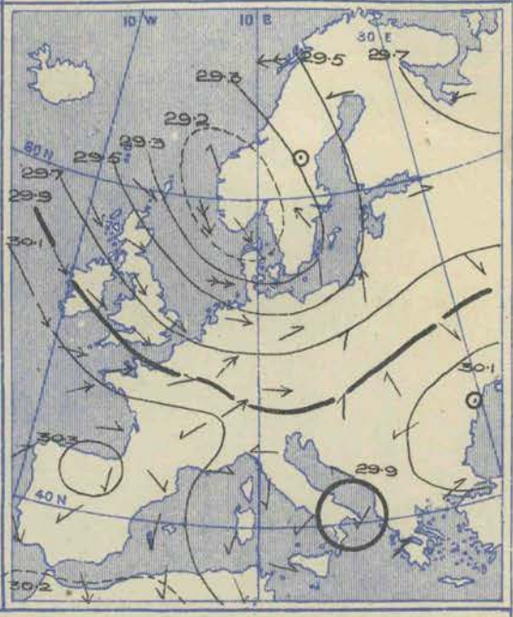
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in the east of Scotland, and also over southern Europe generally, but cloudy or dull in nearly all other places, with rain at several of our own western stations, as well as over Norway, Denmark, north Germany, and at Paris. Snow falling at Moscow. Rain falling later over the greater part of north-western Europe, and also in some parts of Italy.

Temperature risen over our Islands and France, fallen in most other places. Morning readings highest, 59° at La Calle and Patras, 58° at Athens, and 57° at Algiers, above 50° at most of the Mediterranean stations, and also in many parts of Ireland and England. Lowest, 15° at Haparanda, 16° at Archangel, and 22° at Bodö, and below the freezing point over Sweden and western Russia. Rising during day to 50° and upwards over the United Kingdom, exceeding 60° over southern Europe generally, and reaching 68° in Algeria and at Patras, and touching 70° over the southern part of Spain.

Wind moderate to strong from the North-Westward over our extreme north and north-west coasts, and from West in other parts of the United Kingdom, but from the Southward over Scandinavia and Denmark, and blowing a gale at Bodö. Complete cyclonic circulations of light to fresh breezes shown over the Mediterranean, as well as over north-western Russia. Subsequently veering to the North-Westward over nearly the whole of our Islands and the North Sea, and blowing freshly or strongly in many places.

Barometer highest, 30·3 ins. and upwards over the southern part of the Bay of Biscay and the north of Spain. Lowest, 29·2 ins. and less in a depression off the north-west of Scotland, 29·4 ins. and less in a well-marked centre over the north-west of Russia, and 29·9 ins. and less in another system over the Mediterranean. Disturbance off the north-west of Scotland travelling eastwards later, that over Russia dispersing. Mediterranean system scarcely altering its position.

IV.—GENERAL NOTES, etc.

Almost continuously throughout this period the highest pressure was found in an anticyclone of varying size and intensity, lying over the Bay of Biscay and the neighbouring parts of France and Spain, while about the middle of the week an area of relatively high pressure was formed over the north of Scandinavia. Many depressions appeared from the Atlantic and travelled north-eastwards or eastwards over the northern countries. The earlier ones to arrive were rather deep and caused South-Westerly to Westerly gales in many northern and north-western regions, but those of a later date were far less deep, although of considerable size, and the accompanying winds were far less strong. Cyclonic systems were also shown over Italy and its vicinity, and towards the end of the week over central Europe and Russia also. *Temperature* exhibited no marked tendency to increase even over southern Europe and was frequently much below 32° in the far north. Rain was of almost daily occurrence in the north-western and northern regions, but the individual falls were not heavy. Over the greater part of France and Spain the weather was very fine, but some rather weighty falls of rain were experienced from time to time over Italy, the Adriatic, and Algeria. Over the central districts of Europe, the weather was mostly dry, but during the latter days of the period it became very unsettled, and rain or snow was by no means uncommon in different parts of Germany and Austria.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from Observations made at 8 a.m. in the British Islands, Belgium, Holland and Spain; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands, Belgium and Spain; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 74.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	22·8	− 7·2	25	− 8
STRATHPEFFER SPA	32·2	+ 5·1	35	+ 6
EDINBURGH	20·3	− 5·1	23	− 6
COCKLE PARK	31·0	—	34	—
NEWCASTLE-ON-TYNE	19 8	—	22	—
YORK	21·2	− 6·5	24	− 7
CROMER	31·4	—	35	—
LOWESTOFT	30·1	—	33	—
HOLLESLEY BAY	33·0	—	37	—
DUNMOW	25·7	—	29	—
SHEFFIELD	30·4	—	34	—
WORKSOP	23·7	− 3·0	26	− 3
THURCASTON	23·7	− 4·9	25	− 6
TUNBRIDGE WELLS	25·8†	—	29†	—
MARGATE	29·3	− 3·0	33	− 3
BROADSTAIRS	32·2	—	36	—
RAMSGATE	—	—	—	—
EASTBOURNE	28·1	− 7·9	31	− 9
BRIGHTON	26·7	− 8·8	30	− 10
WORTHING	29·6	—	33	—
BOGNOR	34·6†	—	38†	—
WATERGATE PARK	27·0	—	30	—
WESTBOURNE	34·4†	− 3·2	38†	− 4
VENTNOR HOSPITAL	32·9	− 5·7	37	− 6
BOURNEMOUTH	27·3	—	30	—
MARLBOROUGH	20·2	− 9·0	22	− 10
SOUTHPORT	31·6	—	35	—
RHYL	30·4	—	34	—
ABERDOVEY	32·1†	—	36†	—
TENBY	28·8	− 9·2	32	− 10
TORQUAY	30·3	− 7·0	34	− 8
NEWQUAY	21·9	−14·5	24	− 16
GUERNSEY	34·8†	− 5·4	39†	− 6

† The values at Tunbridge Wells, Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 14.] *Third Series.* WEEK ENDING SATURDAY, APRIL 11TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 80.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	56	32	48·5	38·1	43·1	1 above	24	+ 2	11	−10	168	+ 28	367	− 93
	1. SCOTLAND, EAST	61	29	52·8	38·6	45·4	3 above	38	+ 9	10	−12	237	+ 52	388	−126
	2. ENGLAND, N.E.	61	34	53·1	39·0	45·7	3 above	39	+12	8	− 8	331	+139	263	−171
	3. ENGLAND, EAST	58	29	52·4	38·8	45·3	1 above	37	+ 1	9	− 9	388	+147	246	−232
	4. MIDLAND COUNTIES	59	33	53·5	40·1	46·5	2 above	39	+ 1	5	−13	358	+ 94	266*	−214
	5. ENGLAND, SOUTH	60	31	53·1	40·8	46·7	1 above	38	− 2	3	− 8	393	+109	149	−213
Principal Grazing Districts.	6. SCOTLAND, WEST	58	34	52·1	39·8	45·7	2 above	35	+ 5	6	− 9	262	+ 61	228	−141
	7. ENGLAND, N.W.	57	33	51·9	42·3	46·9	2 above	34	+ 3	0	−13	330	+118	194	−162
	8. ENGLAND, S.W.	59	32	54·0	42·9	48·0	2 above	42	+ 5	0	− 9	412	+109	112	−170
	9. IRELAND, NORTH	58	37	51·7	43·1	47·2	2 above	36	+ 2	0	−12	293	+ 28	236	− 80
	10. IRELAND, SOUTH	61	34	55·0	43·6	49·0	3 above	49	+ 9	0	− 8	427	+ 72	133	− 99
	— CHANNEL ISLANDS	56	37	54·4	44·0	49·0	1 above	49	+ 7	0	− 2	537	+143	36	− 78

Rainfall.

	DISTRICTS. (See p. 80.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	17	10 more	81	+17	26·5	+12·3
	1. SCOTLAND, EAST	4	3	1 less	64	+12	12·9	+ 5·3
	2. ENGLAND, N.E.	3	1	3 less	50	+ 1	5·3	− 0·4
	3. ENGLAND, EAST	2	1	3 less	46	− 4	4·8	− 0·6
	4. MIDLAND COUNTIES	2	1	3 less	50	+ 3	7·4	+ 0·9
	5. ENGLAND, SOUTH	1	less than half	4 less	55	+ 8	6·9	− 0·1
Principal Grazing Districts.	6. SCOTLAND, WEST	4	4	2 less	79	+23	23·2	+ 9·6
	7. ENGLAND, N.W.	3	2	3 less	66	+14	12·0	+ 3·9
	8. ENGLAND, S.W.	1	less than half	5 less	65	+10	12·3	+ 2·0
	9. IRELAND, NORTH	5	2	3 less	79	+17	14·5	+ 5·7
	10. IRELAND, SOUTH	2	1	6 less	72	+15	15·6	+ 4·7
	— CHANNEL ISLANDS	2	less than half	5 less	68	+ 9	8·8	+ 0·2

Bright Sunshine.

	DISTRICTS. (See p. 80.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	21	− 9	22	−10	157	− 68	16	− 7
	1. SCOTLAND, EAST	30	− 1	32	− 1	211	− 51	22	− 5
	2. ENGLAND, N.E.	33	+ 5	35	+ 5	238	− 39	24	− 4
	3. ENGLAND, EAST	27	−11	29	−12	297	− 7	29	− 1
	4. MIDLAND COUNTIES	25	− 8	27	− 9	233	− 28	23	− 3
	5. ENGLAND, SOUTH	35	− 3	37	− 3	284	− 15	28	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	28	− 1	30	− 1	192	− 59	19	− 6
	7. ENGLAND, N.W.	27	− 7	29	− 7	228	− 30	23	− 3
	8. ENGLAND, S.W.	36	0	38	0	252	− 68	25	− 7
	9. IRELAND, NORTH	21	−11	22	−11	216	− 46	22	− 5
	10. IRELAND, SOUTH	29	− 6	32	− 6	230	− 71	23	− 7
	— CHANNEL ISLANDS	55	+13	60	+15	343	− 21	33	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this period was finer and drier over the Kingdom generally than for some weeks past. A good deal of rain was, however, again experienced in the north of Scotland.

Temperature was above the mean in all districts, the excess amounting, as a rule, to only 1° or 2°, but to 3° in Ireland S., Scotland E. and England N.E. The highest of the maxima, which were registered on rather irregular dates, ranged from 61° in Scotland E., England N.E., Ireland S., to 57° in England N.W., and to 56° in Scotland N., and the Channel Islands. The lowest of the minima were recorded during the earlier days of the period at most northern and north-western stations, and on Friday in the south; they ranged from 29° in Scotland E. and England E., to 33° in the Midland Counties and England N.W., and to 37° in Ireland N. and the Channel Islands.

Rainfall was much less than the mean in most districts, that over the south-western, southern, and eastern parts of England being especially slight. In Scotland N. the fall was more than twice as much as the normal.

Bright Sunshine was deficient in most localities, but just equal to the mean in England S.W., and in excess in England N.E. and the Channel Islands. The percentage of the possible duration ranged from 60 in the last-named district, to 38 in England S.W., to 27 in the Midland Counties, and to 22 in Ireland N. and Scotland N.

Barometer and Wind.—During the greater part of the period the barometer was highest in an anticyclone extending from the Atlantic to our south-west or west coasts, while the cyclonic centres travelled in an easterly or south-easterly direction over Scandinavia, and their secondaries over our more northern districts and the North Sea. The general direction of the wind was, therefore, between West and North-West or North, and, as gradients were frequently rather steep, its force was often fresh or strong—especially in the north or north-west. In these latter regions it increased to the strength of a gale both on Tuesday and at the end of the period.

207 | 99 Wy. & S. Ltd.
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 79 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	48	32	45·0	36·4	40·5	− 0·2	8	20	7	1·15	+ 0·64	*	*	*	*
	Stornoway	52	36	49·0	39·3	43·9	+ 1·6	25	8	5	1·68	+ 1·05	23·1	− 10·5	24	− 11
	Wick	50	33	47·6	37·4	42·3	+ 0·1	21	13	5	0·82	+ 0·42	*	*	*	*
	Lairg 𝔖	54	34	49·9	36·7	43·0	+ 2·3	29	15	6	1·30	+ 0·71	*	*	*	*
	Glencarron 𝔖	50	33	47·1	37·3	42·0	+ 0·5	14	13	7	4·17	+ 3·03	*	*	*	*
	Fort Augustus 𝔖	56	34	51·5	38·5	44·7	+ 1·5	34	10	5	1·06	+ 0·52	18·4	− 6·4	19	− 7
	Fort William	54	39	49·6	41·2	45·2	+ 1·2	26	2	6	1·86	+ 0·91	17·4	− 12·4	18	− 13
1. SCOTLAND, E.	Nairn	61	35	52·4	39·0	45·4	+ 2·4	36	8	6	0·80	+ 0·47	*	*	*	*
	Aberdeen	59	34	52·1	39·4	45·5	+ 2·4	35	7	4	0·25	− 0·23	30·6	− 3·1	32	− 3
	Braemar 𝔖	56	32	48·8	34·4	41·3	+ 1·7	19	29	5	0·57	+ 0·04	*	*	*	*
	Ochtertyre 𝔖	61	29	55·6	38·1	46·4	+ 3·0	47	11	5	0·19	− 0·35	*	*	*	*
	Leith 𝔖	60	36	55·1	42·6	48·6	+ 4·6	46	0	3	0·05	− 0·28	*	*	*	*
	Marchmont 𝔖	57	35	52·7	38·0	45·0	+ 3·0	38	11	2	0·08	− 0·45	34·8	+ 4·1	37	+ 4
2. ENGLAND, N.E.	Alnwick Castle	61	36	53·9	39·3	46·3	+ 4·1	41	8	3	0·15	− 0·33	*	*	*	*
	Durham	59	35	53·1	37·8	45·1	+ 2·2	39	12	3	0·07	− 0·37	32·8	+ 4·4	35	+ 5
	Shields	58	34	53·1	39·4	45·9	+ 2·9	38	7	3	0·09	− 0·29	*	*	*	*
	Scarborough 𝔐	58	36	53·9	38·4	45·8	+ 2·3	42	10	4	0·16	− 0·24	31·3	—	33	—
	Spurn Head	55	38	50·7	39·5	44·8	+ 1·3	30	7	3	0·10	− 0·20	*	*	*	*
	Fulbeck (Lincolnshire)	57	34	53·9	39·7	46·5	+ 2·3	41	6	2	0·12	− 0·25	32·7	—	35	—
3. ENGLAND, E.	Hillington 𝔐	56	34	52·1	38·0	44·7	0·0	36	11	2	0·09	− 0·29	17·0	− 16·5	18	− 18
	Yarmouth	56	35	50·4	38·3	44·1	+ 0·7	30	10	3	0·10	− 0·29	*	*	*	*
	Geldeston	58	29	52·6	37·3	44·6	+ 0·1	38	13	4	0·15	− 0·20	31·0	− 4·7	33	− 5
	Cambridge	57	34	54·6	38·3	46·1	+ 0·7	44	10	1	0·03	− 0·31	22·1	− 12·6	24	− 14
	Felixstowe	56	34	52·0	40·0	45·7	+ 0·8	34	6	0	0·00	—	36·7†	—	39†	—
	Rothamsted	53	33	51·9	38·8	45·0	+ 0·7	34	9	1	0·02	− 0·42	24·0	− 8·8	26	− 10
	Shoeburyness	57	34	53·4	40·7	46·8	+ 1·0	39	4	0	0·00	− 0·30	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	58	33	53·5	39·1	46·0	+ 3·3	40	8	4	0·19	− 0·29	38·4	—	41	—
	Bawtry (Hesley Hall)	59	36	54·4	40·4	47·1	+ 2·4	42	4	3	0·08	− 0·29	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	56	35	53·6	39·3	46·1	+ 1·1	40	8	2	0·07	− 0·30	*	*	*	*
	Cheadle 𝔐	54	35	51·4	39·3	45·1	+ 1·6	33	8	3	0·15	− 0·32	*	*	*	*
	Birmingham (Edgbaston)	54	38	52·3	41·1	46·4	+ 2·2	35	3	1	0·02	− 0·40	17·0	—	18	—
	Churchstoke 𝔐	57	33	53·8	39·4	46·3	+ 3·1	41	7	1	0·03	− 0·40	25·5	− 7·1	27	− 8
	Hereford 𝔐	57	36	54·7	40·8	47·4	+ 2·3	43	3	1	0·03	− 0·34	*	*	*	*
	Cirencester	56	36	53·5	39·9	46·4	+ 2·6	40	6	2	0·15	− 0·28	22·8	− 11·3	25	− 12
	Oxford	55	38	54·1	41·3	47·4	+ 1·8	41	2	1	0·01	− 0·36	24·4	− 8·4	26	− 9
5. ENGLAND, S.	London	56	34	53·7	40·1	46·6	+ 0·2	40	5	1	0·04	− 0·33	18·0‡	− 9·2‡	19‡	− 10‡
	Swarraton (Alresford) 𝔐	56	31	53·1	38·5	45·5	+ 1·4	39	10	1	0·01	− 0·43	*	*	*	*
	Dungeness	56	33	52·9	38·7	45·5	+ 0·6	38	9	0	0·00	− 0·31	40·7	—	44	—
	Hastings (St. Leonards)	52	38	51·0	40·7	45·6	+ 0·1	31	4	1	0·03	− 0·40	44·4	+ 6·0	48	+ 6
	Southampton	60	38	56·4	41·4	48·5	+ 1·7	48	2	0	0·00	− 0·44	37·6	+ 0·6	40	+ 1
	Portland Bill	54	43	52·6	44·4	48·3	+ 1·3	44	0	0	0·00	—	*	*	*	*
	Shaftesbury 𝔐	55	36	52·3	41·7	46·8	+ 2·2	35	1	1	0·01	− 0·55	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	36	51·4	39·9	45·4	+ 0·9	33	6	7	1·16	+ 0·18	*	*	*	*
	Glasgow	54	37	51·1	40·6	45·6	+ 2·1	31	4	4	0·17	− 0·33	31·9	+ 4·5	34	+ 5
	Cally 𝔖	57	34	53·3	37·5	45·0	+ 0·9	40	13	4	0·34	− 0·30	*	*	*	*
	Aspatria	58	35	52·2	38·4	45·0	+ 1·5	36	10	3	0·36	—	19·1	—	20	—
	Douglas (Isle of Man)	56	39	52·5	42·5	47·3	+ 2·9	37	0	4	0·10	− 0·47	33·5	− 5·8	36	− 6
7. ENGLAND, N.W	Newton Reigny	57	33	52·1	38·4	44·9	+ 2·6	35	10	5	0·45	—	23·4	—	25	—
	Stonyhurst	53	37	50·4	40·3	45·1	+ 1·3	29	5	5	0·57	− 0·03	27·0	− 4·7	29	− 5
	Blackpool 𝔐	53	36	50·6	41·9	46·0	+ 1·4	28	0	4	0·14	− 0·28	23·5	− 8·8	25	− 9
	Manchester (Prestwich)	56	36	52·0	39·9	45·7	+ 1·4	35	6	4	0·15	− 0·31	19·5	—	21	—
	Liverpool Obsy. (Bidston)	56	40	51·9	43·4	47·5	+ 2·1	39	0	3	0·07	− 0·30	31·8	—	34	—
	Chester (Hawarden Bridge)	57	44	54·4	45·7	49·8	+ 3·6	55	0	0	0·00	—	*	*	*	*
	Llandudno 𝔐	56	42	53·0	44·2	48·4	+ 2·4	45	0	3	0·05	− 0·35	26·4	− 6·8	28	− 7
	Holyhead	54	42	51·1	44·3	47·5	+ 1·7	39	0	2	0·04	− 0·41	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	55	42	51·4	44·3	47·7	+ 2·4	40	0	1	0·01	− 0·44	35·6	− 3·6	38	− 4
	Clifton	58	40	54·5	43·5	48·7	+ 3·2	47	0	0	0·00	− 0·50	*	*	*	*
	Bath	58	38	54·7	42·0	48·1	+ 2·1	43	0	0	0·00	− 0·46	22·8	—	25	—
	Arlington (N. Devon)	57	38	52·0	41·0	46·2	+ 2·2	34	3	2	0·10	− 0·60	*	*	*	*
	Cullompton 𝔐	59	32	56·5	40·9	48·3	+ 1·8	49	3	1	0·01	− 0·54	32·2	− 2·1	35	− 2
	Falmouth	57	42	53·5	43·7	48·4	+ 1·6	45	0	0	0·00	− 0·68	46·1	+ 6·2	50	+ 7
	Plymouth	57	40	55·1	43·3	48·9	+ 1·7	48	0	2	0·03	− 0·51	46·1	+ 8·1	50	+ 9
9. IRELAND, N.	Malin Head	52	40	48·6	42·9	45·6	+ 0·5	25	0	7	0·31	− 0·14	*	*	*	*
	Edenfel (Omagh)	54	38	51·6	42·6	46·9	+ 3·3	34	0	4	0·21	− 0·32	*	*	*	*
	Blacksod Point	52	43	51·1	45·1	48·0	+ 4·6	42	0	5	0·24	− 0·45	*	*	*	*
	Markree Castle	57	40	53·7	43·5	48·4	+ 3·4	45	0	5	0·14	− 0·43	21·9	− 9·9	23	− 11
	Armagh	58	37	53·8	41·9	47·6	+ 3·4	40	0	2	0·07	− 0·41	19·6	− 11·1	21	− 12
	Donaghadee	55	37	51·4	42·7	46·8	+ 1·9	34	0	4	0·15	− 0·29	*	*	*	*
10. IRELAND, S.	Dublin	61	38	55·8	44·2	49·7	+ 3·2	54	0	1	0·01	− 0·44	24·0	− 11·6	26	− 13
	Birr Castle	60	36	54·6	42·4	48·2	+ 3·1	43	0	3	0·03	− 0·47	33·3	+ 0·5	36	+ 1
	Kilkenny	61	34	56·1	42·9	49·2	+ 3·1	50	0	0	0·00	− 0·51	*	*	*	*
	Waterford	60	39	57·1	43·3	49·9	+ 4·5	55	0	0	0·00	− 0·62	*	*	*	*
	Roche's Point	57	39	53·9	43·9	48·7	+ 1·5	47	0	2	0·05	− 0·68	*	*	*	*
	Valencia	57	40	53·4	44·6	48·8	+ 1·1	48	0	4	0·20	− 0·70	31·0	− 5·4	33	− 6
	Killarney	?57	41	?55·1	44·0	49·3	+ 2·8	51	0	3	0·13	− 0·68	*	*	*	*
	Foynes	57	37	53·8	43·1	48·2	+ 1·9	43	0	0	0·00	− 0·60	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	44	53·9	45·4	49·5	+ 1·5	53	0	1	0·02	− 0·48	51·0	+ 11·5	55	+ 12
	Jersey	56	37	54·9	42·6	48·5	+ 0·3	46	0	2	0·04	− 0·42	58·3	+ 15·6	63	+ 17

Stations Marked 𝔐 are in connection with the Royal Meteorological Society, and those marked 𝔖 with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

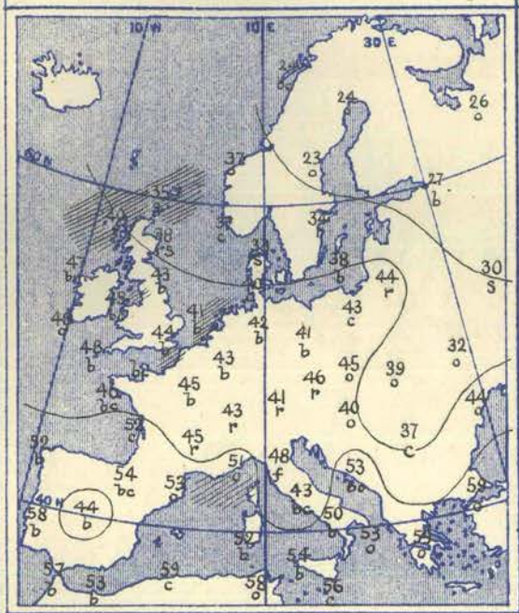
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

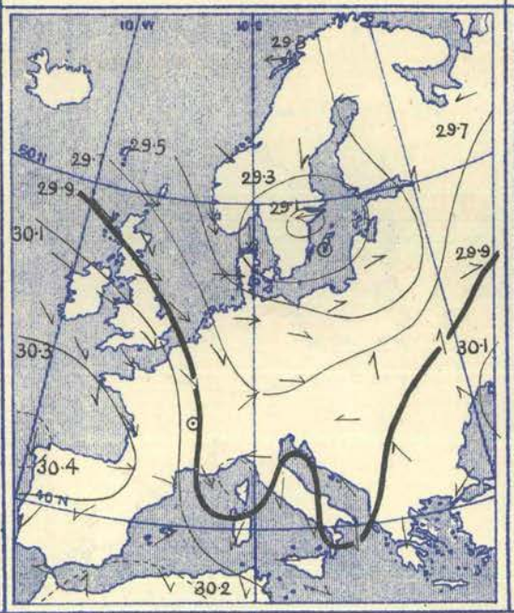
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 5th April, 1903.

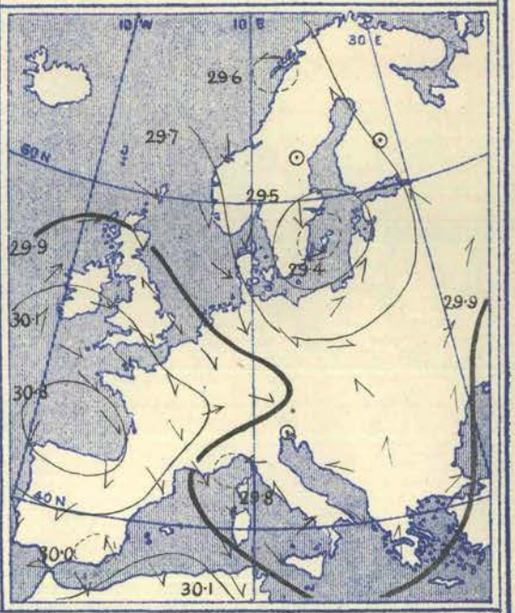
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in most parts of the United Kingdom, the Netherlands, north of France, and on the shores of the Mediterranean; cloudy or dull elsewhere, with passing showers of sleet at a few Scotch stations, rain or snow in the south of Sweden and the Skager Rack, and rain in several parts of central Europe and the east of France. Slight falls of snow or rain later over Russia, Denmark, North Germany, and Scandinavia, and considerable falls of rain in Greece and at Pesaro. Slight showers at most of our own stations, and as much as 0·5 in. at Stornoway.

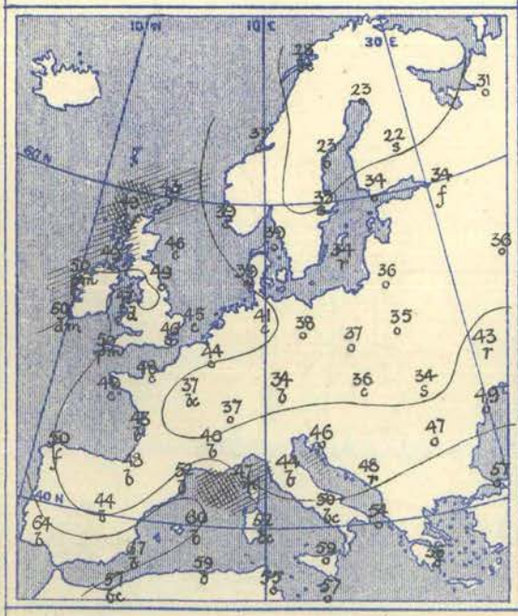
Temperature risen over the Spanish and Scandinavian Peninsulas, and also over the central countries, fallen in most other regions. Ranging at 8 a.m. from 61° at Palma and Oporto, 59° at Constantinople, Athens, and Algiers, and 58° at Barcelona and Lisbon, to below 50° over our area as a whole, to less than 40° over the northern and north-eastern districts, and to less than 30° over the north of Russia and Scandinavia. Lowest reading of all, 24° at Haparanda and Bodö. Rising subsequently to 56° at Leith, 66° at Perpignan, to 70° at Constantinople, and to 75° at Lisbon and Madrid.

Wind in morning chiefly cyclonic, the more important movement being over the south of Scandinavia and the Baltic. The North-North-West wind at Skudesnaes and that from West at Fanö blowing a gale, and the North-Westerly current over our Islands fresh or strong in force. Another, and smaller, circulation shown around the Gulf of Genoa. Wind backing to the Southward in Ireland later, but not much other change in direction. Northern cyclonic circulation becoming less strong in force, but North-Westerly winds in the Riviera and Sardinia increasing to a moderate gale.

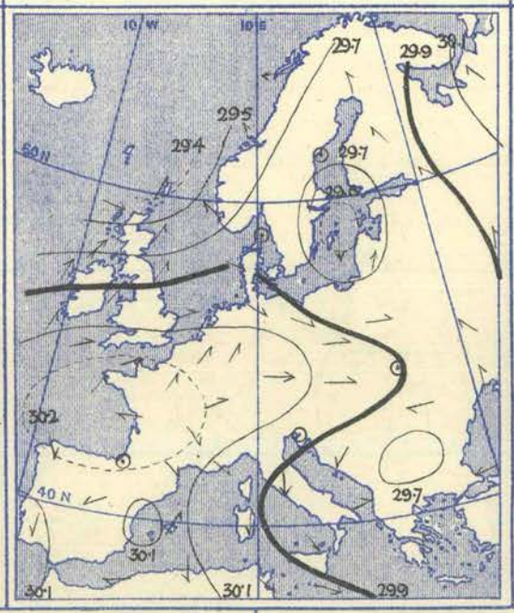
Barometer at 8 a.m. ranging from 30·3 ins. and upwards in an anticyclone extending from the Atlantic over the Bay of Biscay and the north of Spain, and from above 30·1 ins. over the south of Russia, to 29·8 ins. in a small depression near Nice, and to 29·1 ins. and less in a large system over the south of Sweden. Swedish disturbance becoming much less deep by evening, but that in south increasing somewhat in energy. A fresh baric fall setting in along our western coasts and in the Spanish Peninsula.

Monday, 6th April, 1903.

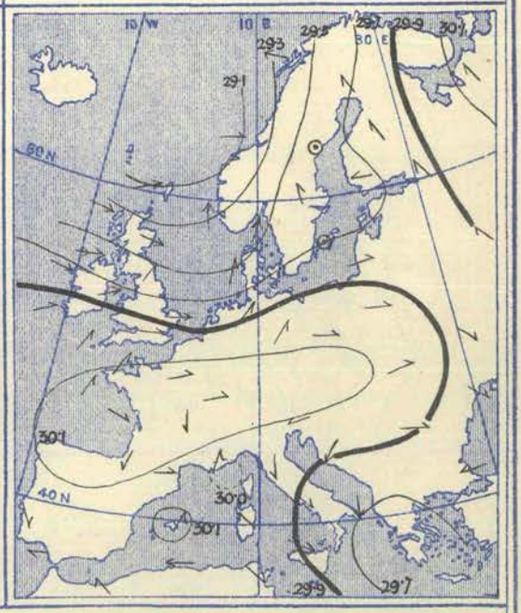
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m fine and bright in the southern, and cloudy or dull over the central and northern regions of Europe. Rainy at several of our own western and northern stations, and at Kieff; rain or snow falling in the south of Sweden, and snow at Kuopio. Rain later in many parts of our Islands, and heavier falls over Germany, Greece, and at Brindisi. Rain or snow general over Scandinavia and Russia.

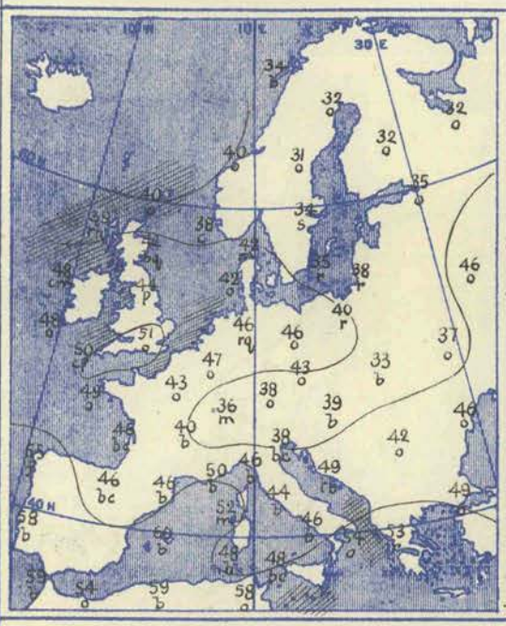
Temperature risen over our Islands, fallen over France and Germany. Ranging at 8 a.m. from 67° at Alicante, 64° at Lisbon, 59° at Algiers, 57° at Constantinople, and 51° or 50° at some of our own stations, to below 40° over the central countries and the major portion of France, and to below 30° in Finland and the north of Scandinavia. Lowest reading of all, 22° at Kuopio. Rising later to 60° at Parsonstown, 69° at Perpignan, 70° at Oran, 77° at San Fernando, to 79° at Lisbon.

Wind in morning showing two complete and one partial cyclonic circulation, the latter consisting of moderate to strong Westerly and South-Westerly winds over our Islands (a gale at Malin Head) and South-Easterly breezes in the west of Norway; and the former of moderate to strong winds over the Baltic and the southern portion of the Gulf of Bothnia, and a very light movement over south-eastern Europe. Light anticyclonic airs prevailing over France and the Bay of Biscay.

Barometer at 8 a.m. ranging from 30·2 ins. and upwards over France and the Bay of Biscay, and 30·13 ins. at Archangel, to about 29·7 ins. over the Balkan Peninsula, less than 29·6 ins. in a well-defined disturbance over and to the northward of Gothland, and to less than 29·4 ins. in another system off the north of Scotland. Scotch depression moving east-south-eastwards later, and barometer falling briskly over Norway and Denmark.

Tuesday, 7th April, 1903.

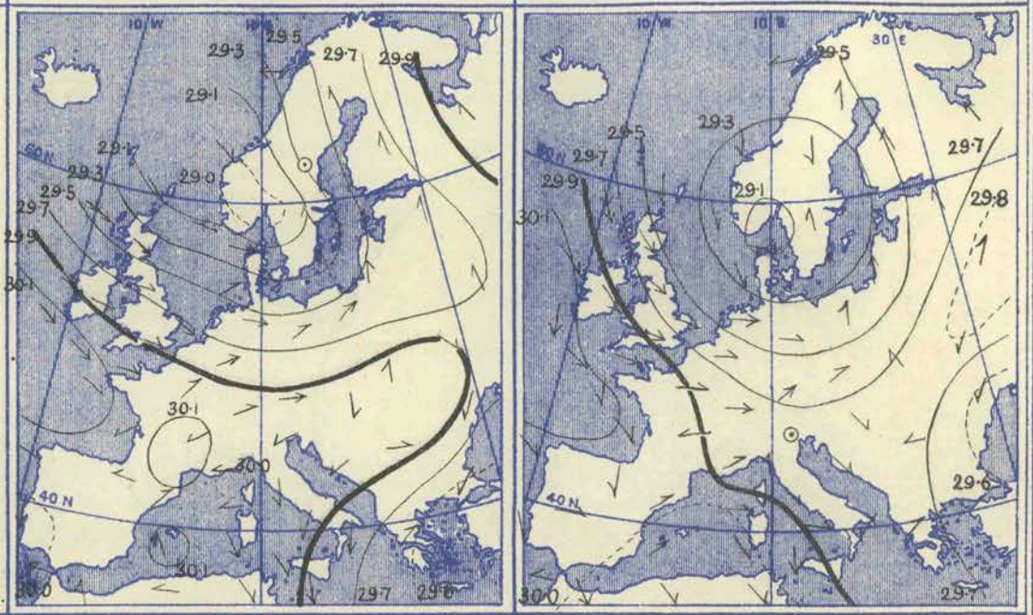
Temperature and Weather. 8 a.m.



Weather at 8 a.m. cloudy or dull generally, with showers at some of our own stations, rain over Holland and Germany, and rain or snow over the south of Sweden. Fine and bright in several parts of southern Europe, but rain falling in Greece and a thunderstorm reported at Lésina. Light rain falling later in most parts of our Islands and heavier amounts over the Netherlands, Germany, and Scandinavia—as much as 1·5 ins. at Frankfort. Rain or snow falling in Finland and Russia.

Temperature changed irregularly. Readings at 8 a.m. highest, 60° at Palma, 59° at Algiers and Oporto, 53° at Athens, and 51° in London. Lowest, 31° at Hernösand, 32° at Archangel, 37° at Lemberg, 39° at Pesaro, 40° at Florence, Limoges, and in the north of Scotland, and 44° at Rome. Highest reading in our Islands during day 56° at Dungeness, but thermometer rising to 70° at Biarritz, 73° at San Fernando and Lisbon, and to 79° at Madrid. Not touching 50° at Malta, and in some parts of Italy.

Barometer and Wind. 8 a.m. and 6 p.m.

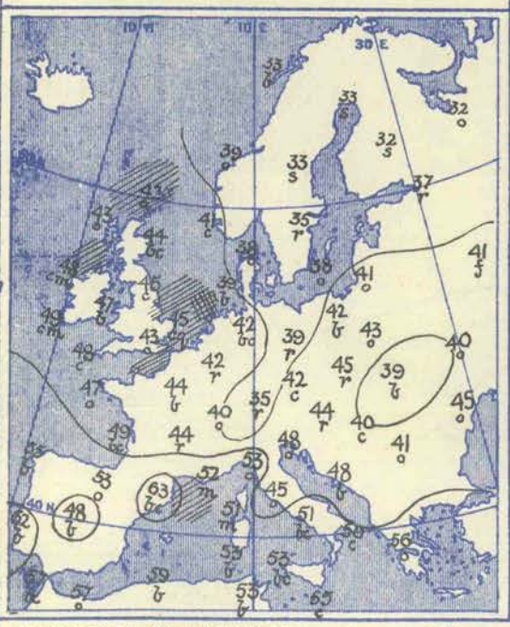


Wind in morning strong to a gale from North-West on our western and northern coasts, strong from West over England, the Channel, and the Netherlands, moderate to strong from South-West over Germany, moderate from South or South-East over the Baltic and the Gulf of Bothnia, and strong from East at Bodö. Moderate to strong from the Northward over Italy and its vicinity, and light from South-West in Greece. Light and variable over the western portion of the Mediterranean. No great change in direction later, but force increasing in most parts of Great Britain.

Barometer fallen except over Italy, Austria, and the west of Ireland. Morning readings highest, 30·1 ins. and upwards in an anticyclone over the Bay of Biscay and in another system over central France; lowest, 29·0 ins. and less, in a depression over Norway; below 29·6 ins. in another disturbance over Asia Minor and the Grecian Archipelago. Latter system moving Northwards during day, and the former South Eastwards. Anticyclonic area spreading Northwards to the north of Ireland.

Wednesday, 8th April, 1903.

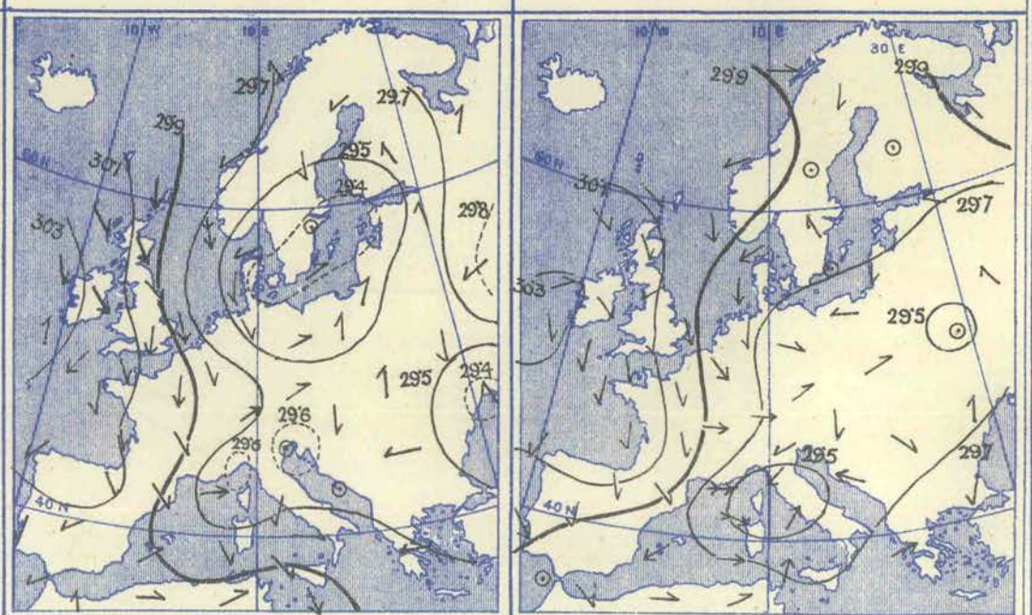
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine and bright at many of our own stations and in most southern regions of Europe; cloudy or overcast elsewhere, with rain at Lyons, Nicolaief, and over the central countries, and snow or rain over Finland and the Gulf of Bothnia. Heavy rain falling later over the Adriatic and the north of Italy—as much as 2·0 ins. at Leghorn. Weather continuing dry over our Islands.

Temperature showing no decided or general change. Ranging at 8 a.m. from 63° at Barcelona and 62° at Lisbon to below 50° over all the northern half of Europe, and to below 40° over Denmark, Scandinavia, and northern Russia. Lowest reading of all, 32° at Kuopio and Archangel. Rising subsequently to 60° at Leith, a rather higher value over the south of France and Italy, to 79° at Algiers, Lisbon and San Fernando, and to 82° at Madrid. Remaining below 50° in the Netherlands, many parts of Germany, and at Cracow.

Barometer and Wind. 8 a.m. and 6 p.m.

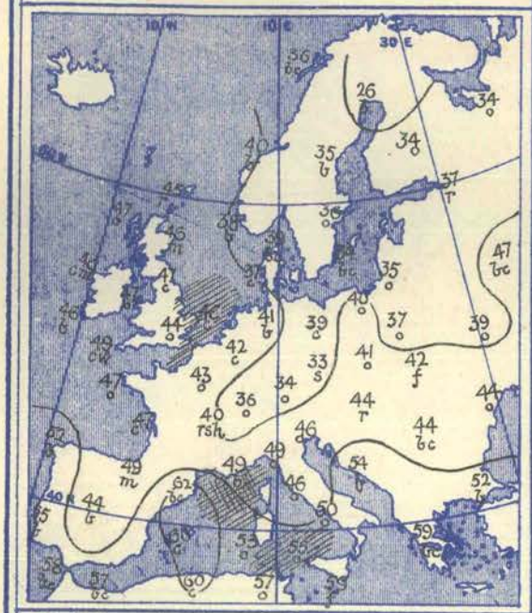


Wind in morning moderate to strong from North or North-West over the United Kingdom and France. Cyclonic circulations shown in different parts of Europe, the chief movement being around the Baltic. Not much force generally, but a North-North-Westerly gale prevailing at Skudesnaes. Cyclonic movement round the Baltic dying out by evening, but cyclonic winds increasing greatly in force over the Gulf of Genoa and its vicinity. Fresh or strong Westerly gales prevailing at 6 p.m. both at Cape Sicié and Sanguinaires.

Barometer risen briskly over north-western, and fallen decidedly over central Europe. Readings in morning, highest, 30·3 ins. and upwards, in an anticyclone extending from the Atlantic over the west of Ireland, lowest, 29·4 ins. and less, (1) in an elongated depression over the south of Sweden, and (2) in another system in the extreme south of Russia. Two other minima (29·6 ins. and less) shown over southern Europe. Swedish disturbance moving quickly south-eastwards later and becoming less important, but another system over the north of Italy increasing greatly in energy. Anticyclone spreading eastwards over our Islands.

Thursday, 9th April, 1903.

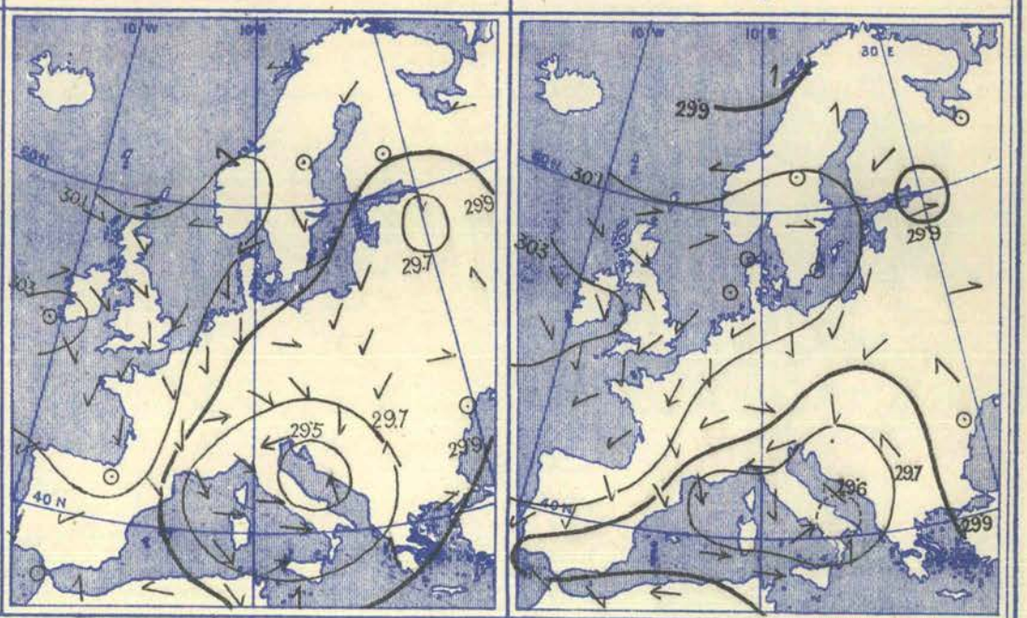
Temperature and Weather. 8 a.m.



Weather in morning fair and dry in most parts of western Europe, but dull in places, with rain at Sumburgh Head; hail and sleet showers reported at Lyons. Dull in most of the eastern, central, and southern countries, with rain at St. Petersburg and Buda Pesth, and with snow at Prague; fine over the Spanish Peninsula. Slight rain falling later in the extreme north of our Islands and the west of Norway, and larger quantities in some parts of Austria.

Temperature fallen over France, Spain, and south Germany; changed little and irregularly elsewhere. Morning readings highest, 67° at Oporto, 65° at Lisbon, and 62° at Barcelona; above 55° at many of the Mediterranean and Spanish coast stations. Lowest, 26° at Haparanda, 33° at Prague, and 34° at Archangel, Kuoplo, Wisby, and Munich; below the freezing point over the northern and central parts of the Continent generally. Rising during day to 50° and upwards in many parts of the United Kingdom, to 55° and upwards over eastern and central Scotland, and to 61° at Nairn, but failing to reach 50° at some of the English stations, exceeding 60° over southern Europe generally, and exceeding 70° over the Spanish Peninsula, the highest reading reported being 79° at Lisbon.

Barometer and Wind. 8 a.m. and 6 p.m.

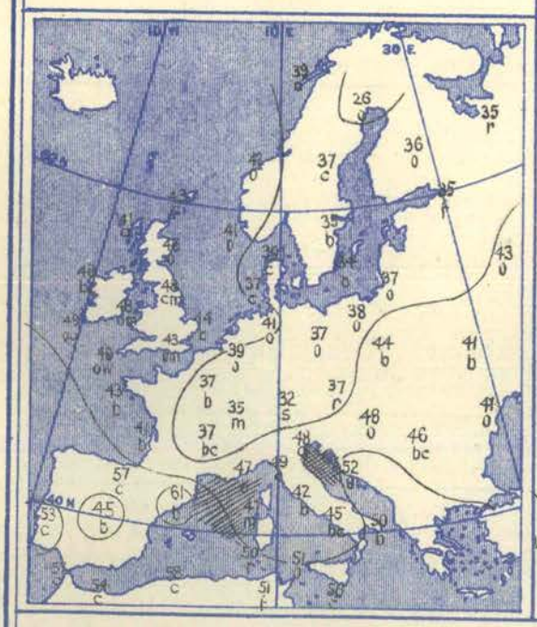


Wind light to moderate from the Westward in the north of our Islands, but Northerly in most other parts of western, northern and central Europe, and fresh in force on our own east and south-east coasts. Light from the Southward over central and southern Russia; variable in Austria; Westerly or North-Westerly in Italy. No important change occurring during day.

Barometer highest, 30·3 ins. and upwards in the South of Ireland; 30·1 ins. and upwards in an anticyclone extending from the Atlantic over the greater part of western Europe. Lowest, 29·5 ins. and less in a cyclonic area lying over the Adriatic; 29·7 ins. and less in another disturbance over the north-west of Russia. Anticyclone spreading later over most of the northern countries; no other change of importance occurring over Europe.

Friday, 10th April, 1903.

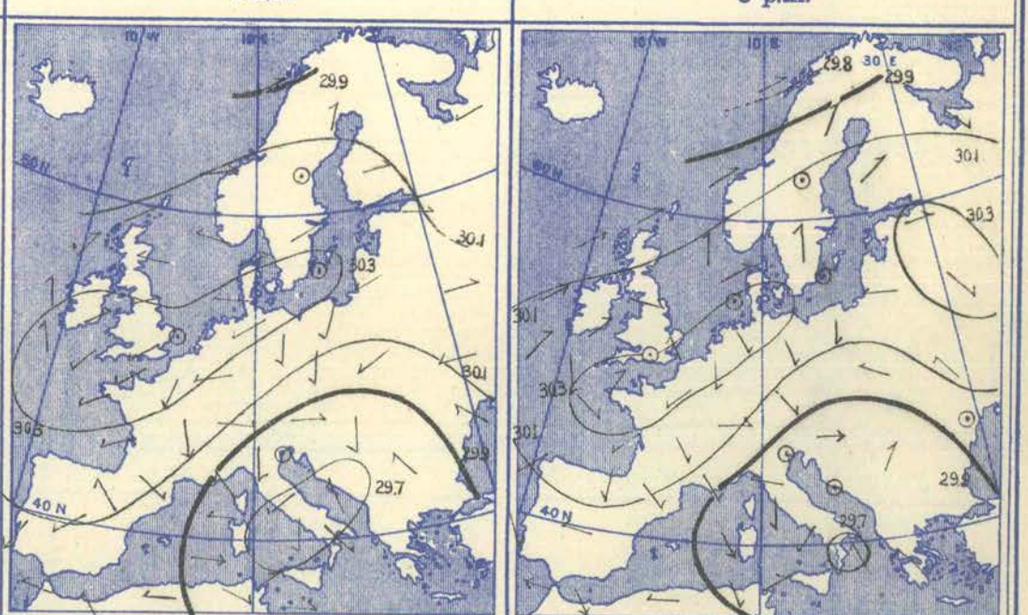
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over southern Europe, the Mediterranean, and France, as well as in the south of Sweden; cloudy or overcast elsewhere, with rain at Archangel and Vienna, and snow at Munich. Rain falling later at our extreme northern and north-western stations, and also over Italy, Austria-Hungary, and in eastern Algeria. Largest amounts, 0·6 in. at Palermo, 0·9 in. at Vienna, and 1·0 in. at La Calle.

Temperature changed irregularly. Readings at 8 a.m. highest, 63° at Lisbon, 61° at Barcelona, 58° at Algiers, 56° at Malta, and 50° at Roche's Point and Leith. Lowest, 26° at Haparanda, 35° at Archangel and St. Petersburg, 37° at Berlin and Lyons, and 42° at Rome. Rising subsequently to 58° at Shields, a little above 60° over the southern parts of France and Italy, to 70° at Nemours, 75° at Madrid and San Fernando, and to 79° at Lisbon. Maxima below 44° at Vienna and Prague, and no higher value than 36° at Munich.

Barometer and Wind. 8 a.m. and 6 p.m.

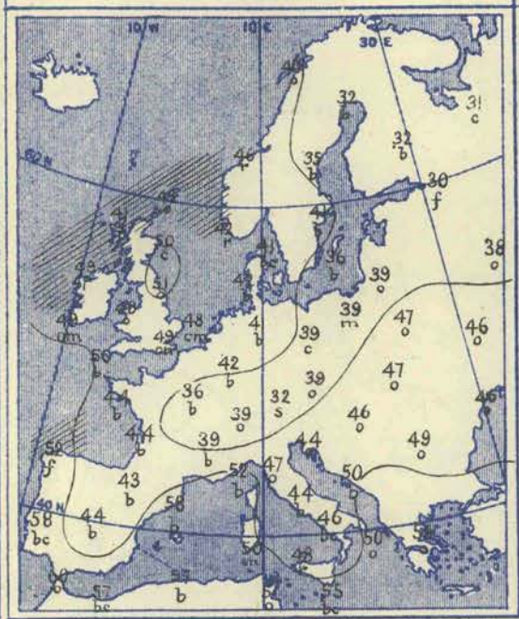


Wind in morning showing a cyclonic circulation of moderate to fresh winds over Italy and its neighbourhood, but light and anticyclonic over all the northern and north-western countries. Very little change later.

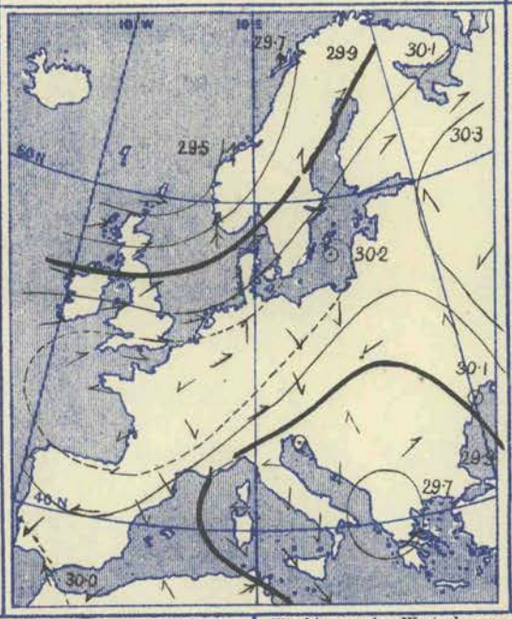
Barometer risen except in Lapland. Ranging in morning from 30·3 ins. and upwards in an anticyclone extending from our south-west coasts to Gothland, to 29·9 ins. at Bodö, and to below 29·7 ins. in a depression over Italy and its vicinity. Barometer falling over north-western Europe later, and anticyclone becoming restricted in size. Italian disturbance moving slowly southwards. Another area of high pressure appearing over Russia.

Saturday, 11th April, 1903.

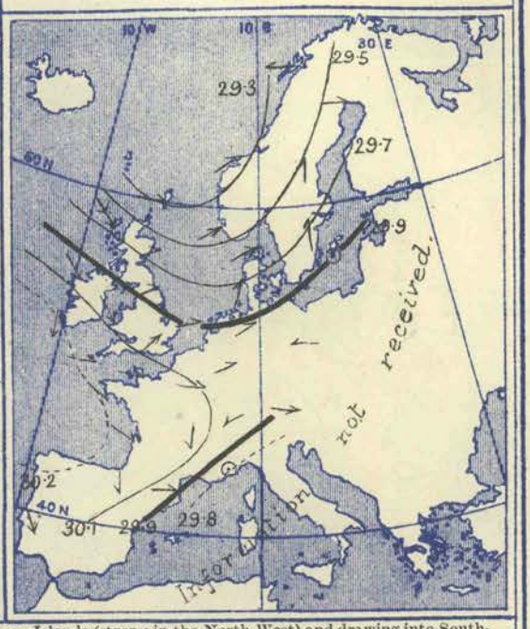
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over France, Sweden, and most southern regions, but rainy at Palermo, Patras, and Pesaro. Cloudy or dull in most other places, with fog over the Gulf of Finland, rain in the west of Norway, at some of our own western stations, and at Buda-Pesth, and snow at Munich. Remaining fine all day over France, but rain falling over the west and north of our Islands, as well as at most stations in Scandinavia, Denmark, the Netherlands, and Germany.

Temperature risen in most places, but fallen in Portugal and the north of Russia. Readings at 8 a.m. highest, 60° at San Fernando, 59° at Athens, 58° at Lisbon, and 51° at North Shields. Lowest, 30° at St. Petersburg, 31° at Archangel, 32° at Munich, 35° at Hernösand, 36° at Paris, 41° at Sfax, and 44° at Madrid and Rome. Rising later to 77° at Lisbon, 68° at Perpignan, 59° at Paris and Frankfürt, 56° at Jersey, and 55° at North Shields. Not exceeding 47° at some of our extreme northern and north-western stations, and only touching 39° at Munich.

Wind in morning Westerly over our Islands (strong in the North-West) and drawing into South-West and South over the North Sea, Denmark, and Scandinavia. A Southerly gale prevailing at Skudesnaes A complete cyclonic circulation shown over the more south-eastern countries, and the North-Westerly wind at Malta blowing strongly. Light and anticyclonic both over France and north-eastern Europe. Veering somewhat over north-western Europe later, and increasing to a fresh to strong gale on our own north-western coasts. Gale at Skudesnaes subsiding.

Barometer risen over Russia, Italy, Tunis, and Algeria, fallen elsewhere—very briskly over Norway and the northern half of our Islands. Ranging in morning from above 30·3 ins. in an anticyclone over central Russia, and above 30·2 ins. in another such system extending from the Bay of Biscay and France to Copenhagen, to 29·7 ins. and less in a depression over the Balkan Peninsula and the south-east of Italy, and to about 29·4 ins. in another disturbance to the northward of the Shetlands. Pressure increasing later in Ireland and the Hebrides, decreasing over France, England, and to the eastward of the North Sea.

IV.—GENERAL NOTES, etc.

The general distribution of pressure over Europe during this week has been rather irregular, and the changes frequent, although not particularly remarkable. As a rule the barometer was highest, either in an anticyclone stretching from the Atlantic across France towards central Europe, or over our own western districts, while some large cyclonic disturbances moved eastwards or east-south-eastwards over Scandinavia, and others—chiefly small and less deep—were shown in various parts of the Mediterranean and south-eastern Europe. The wind over our Islands and their immediate neighbourhood was mainly between west and north-west or north, and occasionally blew with considerable force, but elsewhere it was more variable in direction, and generally less strong. On Wednesday, however, a brisk cyclonic circulation prevailed in the Mediterranean, the Westerly and South-Westerly winds in Corsica, Sardinia, and Sicily, blowing a moderate to strong gale. *Temperature* has shown no general upward tendency as a whole, but the daily maxima over Spain and at the extreme southern stations were sometimes above 75°. Rain was rather frequent with the Mediterranean disturbances, and those in the north brought falls of rain, hail, or snow almost daily to most of the regions under their influence. At Frankfürt, on Tuesday, there was as much as 1·5 ins.; at La Calle, on Friday, 1·0 in.; and at Pesaro and Leghorn, on Thursday, 1·8 ins. and 2·0 ins. respectively.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 80.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	22·5	− 10·1	24	− 11	SHEFFIELD	27·6	—	30	—	WESTBOURNE	35·2†	− 4·7	38†	− 5
STRATHPEFFER SPA	23·0	− 7·4	24	− 8	WORKSOP	24·2	− 4·1	26	− 4	VENTNOR HOSPITAL	33·7	− 7·1	36	− 8
EDINBURGH	23·7	− 3·4	25	− 4	THURCASTON	21·7	− 7·8	23	− 8	BOURNEMOUTH	37·3	—	40	—
COCKLE PARK	35·5	—	38	—	TUNBRIDGE WELLS	43·6†	—	47†	—	MARLBOROUGH	20·5	− 10·5	22	− 11
NEWCASTLE-ON-TYNE	22·0	—	23	—	MARGATE	35·9	+ 1·9	39	+ 2	SOUTHPORT	23·6	—	25	—
YORK	34·1	+ 4·7	37	+ 5	BROADSTAIRS	—	—	—	—	RHYL	—	—	—	—
CROMER	26·5	—	29	—	RAMSGATE	—	—	—	—	ABERDOVEY	37·5†	—	40†	—
LOWESTOFT	35·3	—	38	—	EASTBOURNE	43·1	+ 5·1	46	+ 5	TENBY	—	—	—	—
HOLLESLEY BAY	38·5	—	41	—	BRIGHTON	40·4	+ 2·8	44	+ 3	TORQUAY	48·5	+ 9·2	52	+ 10
DUNMOW	26·4	—	28	—	WORTHING	42·4	—	46	—	NEWQUAY	31·2	− 7·4	34	− 8
					BOGNOR	—†	—	—†	—	GUERNSEY	55·8†	+ 13·0	61†	+ 14
					WATERGATE PARK	31·5	—	34	—					

† The values at Tunbridge Wells, Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—Owing mainly to Telegraphic errors, since discovered, the following values must be substituted for those that have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Vol. xx. No. 9, p. 50.	Scilly	—	—	—	42·3	46·1	+ 0·2	28	—	—	—	—	—	—	—	—
,, ,, 10, p. 56.	,,	—	—	—	42·7	46·7	+ 0·8	33	0	—	—	—	—	—	—	—
,, ,, 11, p. 62.	Hillington	—	—	52·9	—	46·8	+ 5·4	37	—	—	—	—	—	—	—	—
,, ,, 12, p. 68.	Jersey	—	44	—	46·4	52·5	+ 6·6	74	—	—	—	—	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 15.] *Third Series.* WEEK ENDING SATURDAY, APRIL 18TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 86.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	48	24	41·0	29·0	34·7	8 below	0	−25	51	+33	168	+ 3	418	− 60
	1. SCOTLAND, EAST	52	24	42·5	28·9	35·4	8 below	1	−31	44	+26	238	+ 21	432	−100
	2. ENGLAND, N.E.	51	26	43·8	30·6	36·9	7 below	5	−25	39	+26	336	+114	302	−145
	3. ENGLAND, EAST	58	26	46·9	31·1	38·7	7 below	14	−26	39	+25	402	+121	285	−207
	4. MIDLAND COUNTIES	52	25	46·5	29·9	37·8	8 below	13	−29	43	+28	371	+ 65	309	−186
	5. ENGLAND, SOUTH	54	24	47·6	32·0	39·5	7 below	16	−28	37	+29	409	+ 81	186	−184
Principal Grazing Districts.	6. SCOTLAND, WEST	51	24	45·1	29·9	37·1	8 below	9	−25	42	+30	271	+ 36	270	−111
	7. ENGLAND, N.W.	49	24	44·3	32·5	38·1	8 below	6	−29	33	+23	336	+ 89	227	−139
	8. ENGLAND, S.W.	52	25	47·5	33·7	40·3	7 below	15	−26	31	+25	427	+ 83	143	−145
	9. IRELAND, NORTH	52	26	45·5	32·5	38·7	7 below	10	−28	34	+25	303	0	270	− 55
	10. IRELAND, SOUTH	56	25	48·8	32·6	40·3	7 below	19	−25	35	+29	446	+ 47	168	− 70
	— CHANNEL ISLANDS	53	37	49·3	39·6	44·2	5 below	25	−22	7	+ 6	562	+121	43	− 72

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 86.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	7	1 more	86	+18	27·2	+12·4	39	+ 7	40	+ 7	196	− 62	18	− 6
	1. SCOTLAND, EAST	5	3	1 less	69	+13	13·2	+ 5·1	44	+11	44	+11	255	− 40	24	− 4
	2. ENGLAND, N.E.	5	6	2 more	55	+ 2	5·9	− 0·2	49	+18	51	+18	287	− 21	26	− 2
	3. ENGLAND, EAST	4	3	0 (average)	50	− 4	5·1	− 0·7	58	+21	60	+22	355	+ 14	32	+ 1
	4. MIDLAND COUNTIES	3	2	3 less	53	+ 3	7·6	+ 0·7	58	+26	60	+27	291	− 2	26	0
	5. ENGLAND, SOUTH	2	1	4 less	57	+ 7	7·0	− 0·4	55	+16	58	+17	339	+ 2	30	0
Principal Grazing Districts.	6. SCOTLAND, WEST	3	4	2 less	82	+23	23·6	+ 9·3	55	+18	56	+19	247	− 41	23	− 4
	7. ENGLAND, N.W.	3	3	1 less	69	+14	12·3	+ 3·8	59	+25	61	+26	287	− 5	26	− 1
	8. ENGLAND, S.W.	2	2	4 less	67	+ 9	12·5	+ 1·6	58	+18	60	+19	310	− 49	28	− 5
	9. IRELAND, NORTH	3	5	0 (average)	82	+16	15·0	+ 5·7	43	+10	45	+10	259	− 36	24	− 3
	10. IRELAND, SOUTH	3	2	5 less	75	+14	15·8	+ 4·2	49	+12	51	+12	279	− 59	25	− 5
	— CHANNEL ISLANDS	2	2	3 less	70	+ 8	9·0	− 0·1	56	+12	59	+13	399	− 9	36	− 1

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was very bright and also extremely wintry for the time of year. Snow or hail showers fell very frequently—mostly over the northern and eastern districts—and, although they were often too slight to yield water in the gauge, they were at times very heavy—especially along the north-east and east coasts of Great Britain.

Temperature was much below the mean, the deficit amounting to 7° or 8° over the Kingdom generally, but to only 5° in the Channel Islands. The highest of the maxima, which were recorded on rather irregular dates, ranged from 58° in England E., and 56° in Ireland S., to 49 in England N.W., and to 48° in Scotland N. The daily maxima were, as a rule, far below 50°, and occasionally below 40° at some northern or north-eastern stations. The lowest of the minima were registered during the latter half of the week, when they were as low as 24° in England S. and in several northern districts, and only 1° or 2° higher over the country as a whole. In the Channel Islands, however, the thermometer did not fall below 37°. The lowest grass minimum reported was 14°, which occurred at Cullompton on Friday.

Rainfall was less than the mean generally, but just equalled that value in Ireland N., and England E., and exceeded it in Scotland N. and England N.E.

Bright Sunshine was unusually abundant and the distribution fairly equable. The percentage of the possible duration ranged from 61 in England N.W., 60 in England E., the Midland Counties, and England S.W., 59 in the Channel Islands, and 58 in England S., to 45 in Ireland N., and to 40 in Scotland N.

Barometer and Wind.—During nearly the whole of this period the barometer was highest in an anticyclone extending from the Atlantic over our south-western or western coasts, the only exception being on Wednesday, immediately after a small disturbance had moved quickly south-eastwards over our Islands to Holland, when pressure became temporarily highest in a band stretching eastwards from the Bay of Biscay. The lowest pressure was found in large cyclonic systems which moved or spread south-eastwards over Scandinavia, and whose small and ill-defined secondaries affected the weather over our northern and eastern districts. The prevailing North-Westerly to Northerly or North-Easterly winds were very dry and cold, and at first fresh or strong throughout the Kingdom, but later on they died down over the western districts, and at the end of the period were decreasing in force in the east also.

207 | 90 Wy. & S. Ltd.
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 85 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	41	26	38·9	29·3	33·9	− 7·5	0	57	6	0·42	− 0·05	*	*	*	*
	Stornoway	48	30	41·7	32·4	36·8	− 6·3	0	36	7	1·10	+ 0·51	39·3	+ 2·8	40	+ 3
	Wick	43	28	40·6	29·4	34·7	− 8·4	0	51	7	0·99	+ 0·60	*	*	*	*
	Lairg Ⓢ	45	24	42·3	26·8	34·2	− 7·7	1	51	7	0·95	+ 0·39	*	*	*	*
	Glencarron Ⓢ	44	24	38·7	26·6	32·4	−10·3	0	67	6	1·34	+ 0·29	*	*	*	*
	Fort Augustus Ⓢ	47	27	42·2	27·6	34·6	− 9·8	1	48	2	0·06	− 0·54	34·4	+ 7·5	35	+ 8
	Fort William	46	29	42·5	30·8	36·4	− 8·5	1	38	1	0·11	− 0·74	41·6	+ 9·5	42	+ 10
1. SCOTLAND, E.	Nairn	43	29	40·9	29·6	35·0	− 9·0	0	49	7	0·25	− 0·05	*	*	*	*
	Aberdeen	43	28	40·1	30 1	34·9	− 9·0	0	50	7	0·79	+ 0·32	45·6	+ 9·8	46	+ 10
	Braemar Ⓢ	38	24	36·1	27·2	31·4	− 9·4	0	74	7	0·49	− 0·02	*	*	*	*
	Ochtertyre Ⓢ	52	26	45·9	29·0	37·0	− 7·5	11	45	2	0·05	− 0·48	*	*	*	*
	Leith	51	29	49·4	30·7	39·6	− 5·4	21	42	2	0·12	− 0·21	*	*	*	*
	Marchmont Ⓢ	45	25	42·7	26·7	34·3	− 8·7	2	51	3	0·27	− 0·26	44·3	+ 11·5	45	+ 12
2. ENGLAND, N.E.	Alnwick Castle	46	28	42·6	30·1	36·1	− 6·9	2	40	4	0·61	+ 0·14	*	*	*	*
	Durham	47	26	43·3	29·0	35·8	− 8·0	4	44	3	0·49	+ 0·05	46·6	+ 16·9	48	+ 17
	Shields	47	28	43·7	29·7	36·4	− 7·4	5	42	6	0·71	+ 0·34	*	*	*	*
	Scarborough Ⓜ	51	30	44·3	31·7	37·7	− 6·7	6	36	7	1·04	+ 0·64	41·3	—	43	—
	Spurn Head	46	30	43·9	33·4	38·4	− 6·1	5	30	6	0·47	+ 0·17	*	*	*	*
	Fulbeck (Lincolnshire)	48	27	45·2	29·6	37·0	− 8·1	9	43	3	0·07	− 0·30	58·1	—	60	—
3. ENGLAND, E.	Hillington Ⓜ	58	30	46·4	31·4	38·5	− 7·2	12	37	6	0·43	+ 0·03	51·7	+ 16·0	54	+ 17
	Yarmouth	46	29	43·9	31·4	37·4	− 7·0	5	37	7	0·77	+ 0·39	*	*	*	*
	Geldeston	50	29	46·8	30·8	38·4	− 7·1	13	40	7	0·76	+ 0·41	49·2	+ 11·6	51	+ 12
	Cambridge	52	26	50·0	29·3	39·2	− 7·5	22	47	3	0·08	− 0·27	63·7	+ 27·0	66	+ 28
	Felixstowe	50	28	46·7	31·6	38·8	− 7·5	13	37	3	0·20	—	56·2†	—	59†	—
	Rothamsted	50	27	46·8	31·0	38·5	− 6·9	13	39	2	0·13	− 0·31	63·5	+ 29·0	66	+ 30
	Shoeburyness	52	29	48·0	32·4	39·8	− 7·4	17	35	2	0·04	− 0·26	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	48	26	45·0	28·7	36·5	− 7·4	8	46	4	0·31	− 0·19	60·7	—	63	—
	Bawtry (Hesley Hall)	50	28	46·1	30·6	38·0	− 7·9	11	40	2	0·21	− 0·17	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	52	28	49·7	30·3	39·5	− 6·8	22	43	2	0·04	− 0·33	*	*	*	*
	Cheadle Ⓜ	47	25	43·2	28·8	35·7	− 9·0	3	45	4	0·32	− 0·15	*	*	*	*
	Birmingham (Edgbaston)	48	27	44·8	30·8	37·5	− 7·6	8	39	3	0·09	− 0·35	46·7	—	49	—
	Churchstoke Ⓜ	50	26	46·1	28·8	37·0	− 7·2	11	46	4	0·18	− 0·25	66·6	+ 32·3	69	+ 34
	Hereford Ⓜ	51	26	48·4	30·1	38·8	− 7·4	18	43	2	0·04	− 0·34	*	*	*	*
	Cirencester	50	25	47·9	30·1	38·6	− 6·4	17	43	2	0·14	− 0·31	61·6	+ 25·3	64	+ 26
	Oxford	50	28	47·3	30·9	38·7	− 8·0	15	40	2	0·06	− 0·31	57·4	+ 22·4	60	+ 23
5. ENGLAND, S.	London	50	29	48·3	32·6	40·1	− 7·6	18	35	1	0·05	− 0·33	52·3‡	+ 22·8‡	55‡	+ 24‡
	Swarraton (Alresford) Ⓜ	48	25	46·3	29·6	37·6	− 7·6	12	44	2	0·06	− 0·37	*	*	*	*
	Dungeness	52	24	46·7	30·1	38·0	− 8·1	13	42	4	0·05	− 0·27	59·1	—	62	—
	Hastings (St. Leonards)	50	30	46·7	32·4	39·2	− 7·4	13	34	1	0·02	− 0·40	56·5	+ 16·1	59	+ 17
	Southampton	54	28	50·9	32·0	41·0	− 7·0	25	35	2	0·13	− 0·31	60·3	+ 21·0	63	+ 22
	Portland Bill	50	31	48·0	36·0	41·7	− 6·3	17	23	1	0·03	—	*	*	*	*
	Shaftesbury Ⓜ	49	28	46·4	31·5	38·6	− 7·1	12	37	2	0·03	− 0·54	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	47	30	43·0	31·0	36·7	− 8·8	3	37	6	0·24	− 0·64	*	*	*	*
	Glasgow	47	28	43·5	30·6	36·7	− 7·9	4	39	3	0·30	− 0·18	48·0	+ 18·5	49	+ 19
	Cally Ⓢ	51	24	43·8	27·3	37·5	− 7·3	19	52	3	0·48	− 0·12	*	*	*	*
	Aspatria	47	25	45·2	28·4	36·4	− 8·1	9	47	1	0·42	—	57·8	—	59	—
	Douglas (Isle of Man)	47	29	45·0	32·1	38·2	− 7·1	8	34	3	0·54	− 0·01	59·9	+ 18·2	62	+ 19
7. ENGLAND, N.W	Newton Reigny	48	24	44·0	28·0	35·6	− 7·8	6	48	4	0·38	—	55·8	—	57	—
	Stonyhurst	44	29	42·5	31·8	36·9	− 8·1	1	34	2	0·58	+ 0·03	58·6	+ 24·6	60	+ 25
	Blackpool Ⓜ	47	26	45·1	30·9	37·7	− 8·1	9	39	4	0·49	+ 0·09	60·3	+ 25·6	62	+ 26
	Manchester (Prestwich)	46	26	44·1	30·2	36·8	− 8·4	6	40	3	0·51	+ 0·05	50·6	—	52	—
	Liverpool Obsy. (Bidston)	45	31	43·9	33·9	38·7	− 7·8	5	28	3	0·18	− 0·17	61·5	—	63	—
	Chester (Hawarden Bridge)	49	29	45·4	33·3	39·1	− 8·0	10	31	2	0·08	—	*	*	*	*
	Llandudno Ⓜ	47	31	44·9	35·8	40·1	− 6·9	8	22	2	0·23	− 0·17	60·5	+ 24·9	62	+ 26
	Holyhead	47	34	44·3	35·7	39·8	− 6·8	6	22	3	0·27	− 0·17	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	48	34	46·3	35·7	40·8	− 5·4	12	24	2	0·23	− 0·21	60·5	+ 18·7	63	+ 20
	Clifton	50	30	48·3	34·0	40·8	− 5·8	18	30	1	0·06	− 0·44	*	*	*	*
	Bath	50	27	48·0	31·6	39·4	7·8	17	38	2	0·13	− 0·34	54·6	—	57	—
	Arlington (N. Devon)	47	27	45·1	32·4	38·5	− 6·5	9	34	3	0·36	− 0·31	*	*	*	*
	Cullompton Ⓜ	52	25	49·1	29·9	39·0	− 8·7	20	44	2	0·07	− 0·49	53·1	+ 16·9	55	+ 18
	Falmouth	51	34	47·2	37·0	41·9	− 5·8	15	20	3	0·21	− 0·45	59·3	+ 17·0	62	+ 18
	Plymouth	50	32	48·6	35·5	41·7	− 6·5	18	26	2	0·09	− 0·45	63·6	+ 23·4	66	+ 24
9. IRELAND, N.	Malin Head	45	32	42·3	33·9	37·9	− 7·8	1	27	5	0·65	+ 0·22	*	*	*	*
	Edenfel (Omagh)	48	26	45·4	29·7	37·2	− 7·5	10	43	3	0·57	+ 0·04	*	*	*	*
	Blacksod Point	50	35	46·4	36·4	41·2	− 5·9	12	21	3	0·45	− 0·22	*	*	*	*
	Markree Castle	52	26	47·9	30·9	39·0	− 6·7	17	40	3	0·52	− 0·03	44·2	+ 10·2	46	+ 11
	Armagh	51	28	46·4	30·4	38·0	− 7·2	12	41	3	0·44	− 0·04	42·5	+ 9·7	44	+ 10
	Donaghadee	47	31	44·4	33·4	38·6	− 7·2	7	30	3	0·33	− 0·12	*	*	*	*
10. IRELAND, S.	Dublin	50	30	47·4	32·4	39·5	− 7·8	15	35	3	0·10	− 0·36	49·9	+ 11·9	51	+ 12
	Birr Castle	52	25	48·0	30·6	38·9	− 7·5	17	41	1	0·11	− 0·39	51·3	+ 16·0	53	+ 17
	Kilkenny	52	28	48·1	30·6	38·9	− 8·1	17	41	1	0·08	− 0·43	*	*	*	*
	Waterford	52	29	48·7	31·9	39·9	− 6·4	19	37	1	0·02	− 0·58	*	*	*	*
	Roche's Point	50	30	48·1	34·7	41·1	− 6·9	17	28	5	0·20	− 0·53	*	*	*	*
	Valencia	50	31	48·4	35·3	41·5	− 6·8	18	25	4	0·22	− 0·68	46·0	+ 7·9	48	+ 8
	Killarney	56	29	51·5	32·9	41·8	− 5·5	27	36	3	0·41	− 0·40	*	*	*	*
	Foynes	52	29	49·9	32·3	40·7	− 6·2	22	37	2	0·33	− 0·27	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	51	37	49·0	39·3	45·9	− 4·6	25	8	1	0·11	− 0·39	63·7	+ 22·0	66	+ 23
	Jersey	53	37	49·6	39·9	44·5	− 4·6	26	6	3	0·18	− 0·26	56·5	+ 11·2	60	+ 12

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

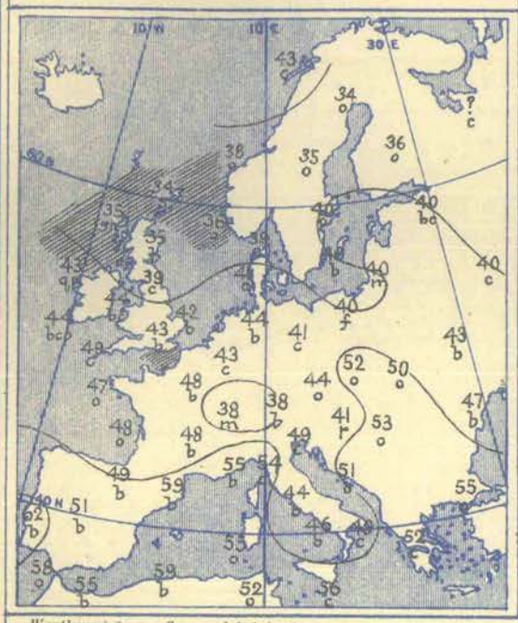
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

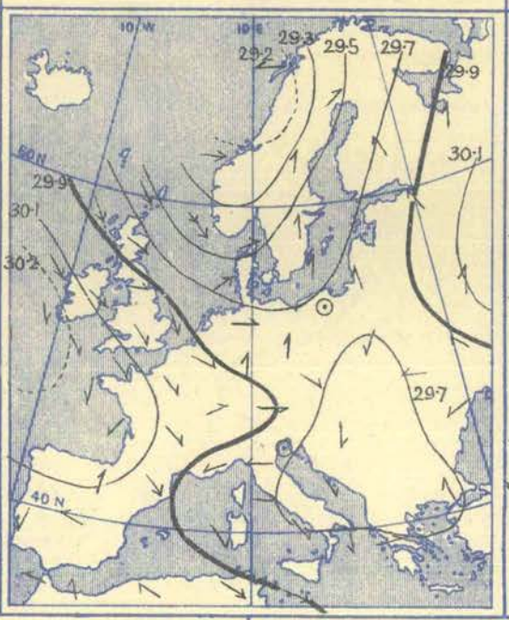
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 12th April, 1903.

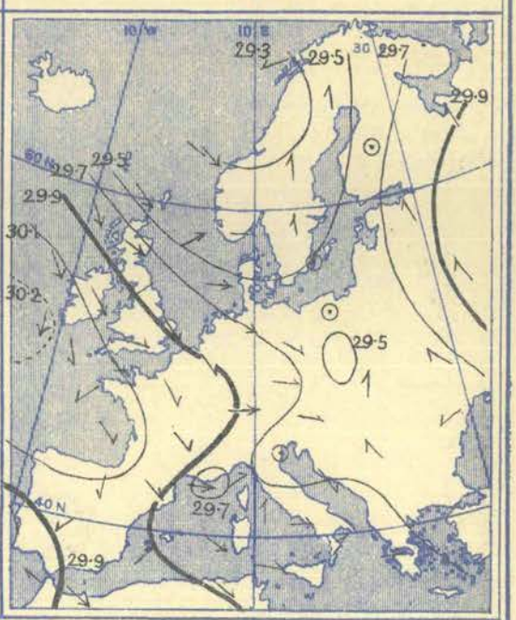
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in most parts of our Islands, France, and southern Europe, but snow or hail showers falling in the Shetlands, Hebrides, and at Blacksod Point. Dull over the northern and central countries, with rain at Vienna, Copenhagen, and Karlstad and fog at Helsingfors. Rain continuing all day at Vienna and becoming general over Austria-Hungary and Germany, and hail, sleet, or snow falling in most parts of the United Kingdom and Scandinavia.

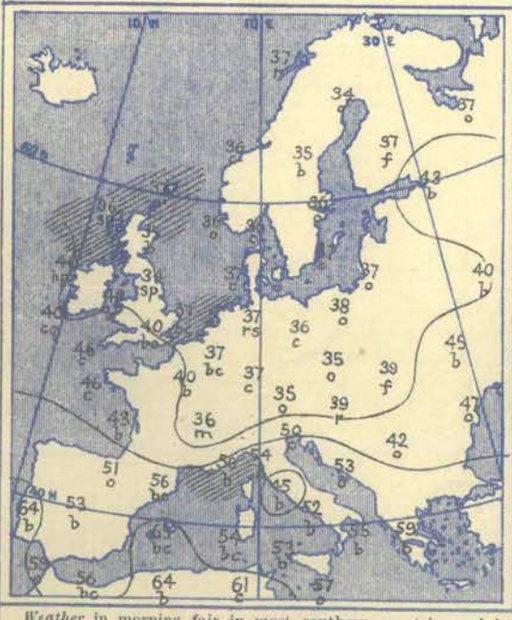
Temperature fallen decidedly over our Islands and on the eastern shores of the North Sea, risen elsewhere. Readings at 8 a.m. highest, 62° at Lisbon and Barcelona, 59° at Algiers, 56° at Malta, and 55° at Nice. Lowest, 34° at Haparanda and in the north of Scotland, 38° at Munich and Belfort, 42° at Bath, Yarmouth, and Breslau, 43° at Florence, and 46° at Naples. Rising subsequently to 70° at Algiers and Marseilles, 72° at San Fernando, 73° at Perpignan, and 81° at Madrid. Remaining below 50° at most German stations, in the east of France, and in nearly all parts of these Islands, but rising to 54° at St. Petersburg.

Wind in morning fresh or strong from North-West over the United Kingdom (a gale at Malin Head), moderate or fresh from West or South-West over Germany and Denmark, moderate from South over the Baltic and Sweden, and from East at Bodö. A feeble and irregular cyclonic circulation prevailing over the more south-eastern countries, and light Easterly winds over Spain. Very little change as a whole later, but wind veering towards North-West over the Netherlands and Germany.

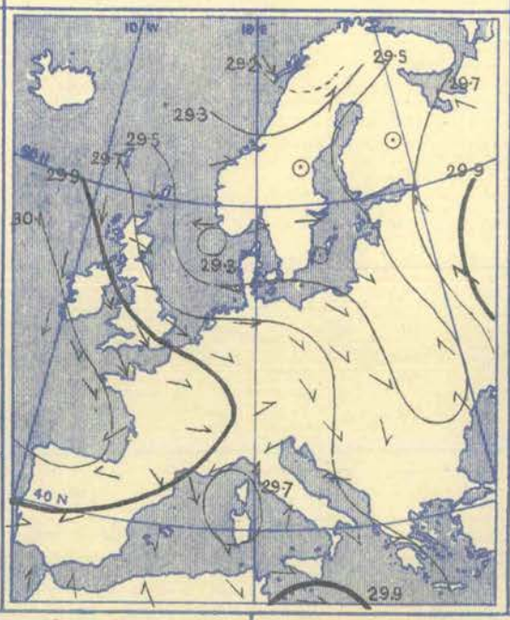
Barometer risen over Ireland and Scotland, fallen elsewhere—most over Scandinavia, the Baltic, and Germany. Morning readings ranging from above 30·2 ins. over the south-west of Ireland, and above 30·1 ins. over central Russia, to below 29·7 ins. in a large shallow area extending from Cracow and Trieste to Constantinople, and to 29·2 ins. and less in a disturbance over the North-West of Norway. Latter system moving eastwards later, and that in south becoming deeper. A separate disturbance forming over the Gulf of Genoa. Pressure giving way somewhat in both anticyclonic areas.

Monday, 13th April, 1903.

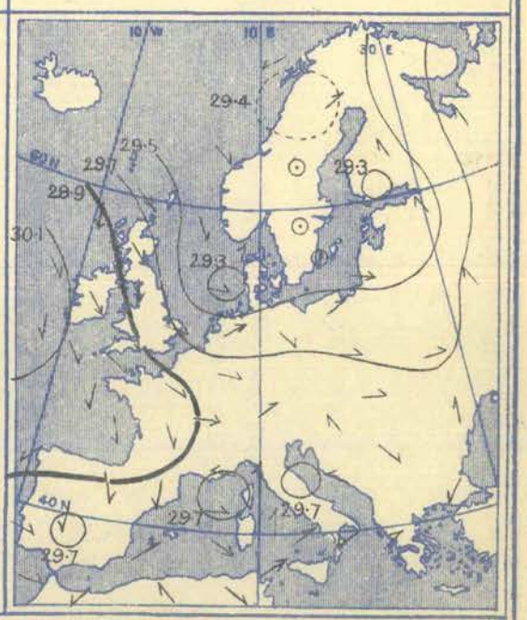
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair in most southern countries and in several parts of the United Kingdom, but snow or hail showers prevailing at some of our northern and north-western stations. Cloudy or dull in the central and northern regions, with rain in Lapland, sleet showers at Cuxhaven, and fog at Kuopio. Hail or snow showers falling later in most parts of our Islands, and rather heavy amounts occurring in Germany, the Netherlands, Denmark, and Finland.

Temperature fallen over our Islands, France, and central Europe, risen over Italy and Algeria. Ranging at 8 a.m. from 65° at Palma, 64 at Lisbon and Algiers, and 59° at Athens, to below 40° over the greater portion of the United Kingdom and the more northern and central parts of the Continent. Lowest reading of all 34° at Haparanda, Nairn, Shields, and Donaghadee. Maxima during day as high as 84° at Palma and Oporto, 81° at Algiers, and between 65° and 70° at most southern stations. Remaining below 50° over Germany, the Netherlands, the north of France and our Islands, and not touching 45° on our north-east and north coasts.

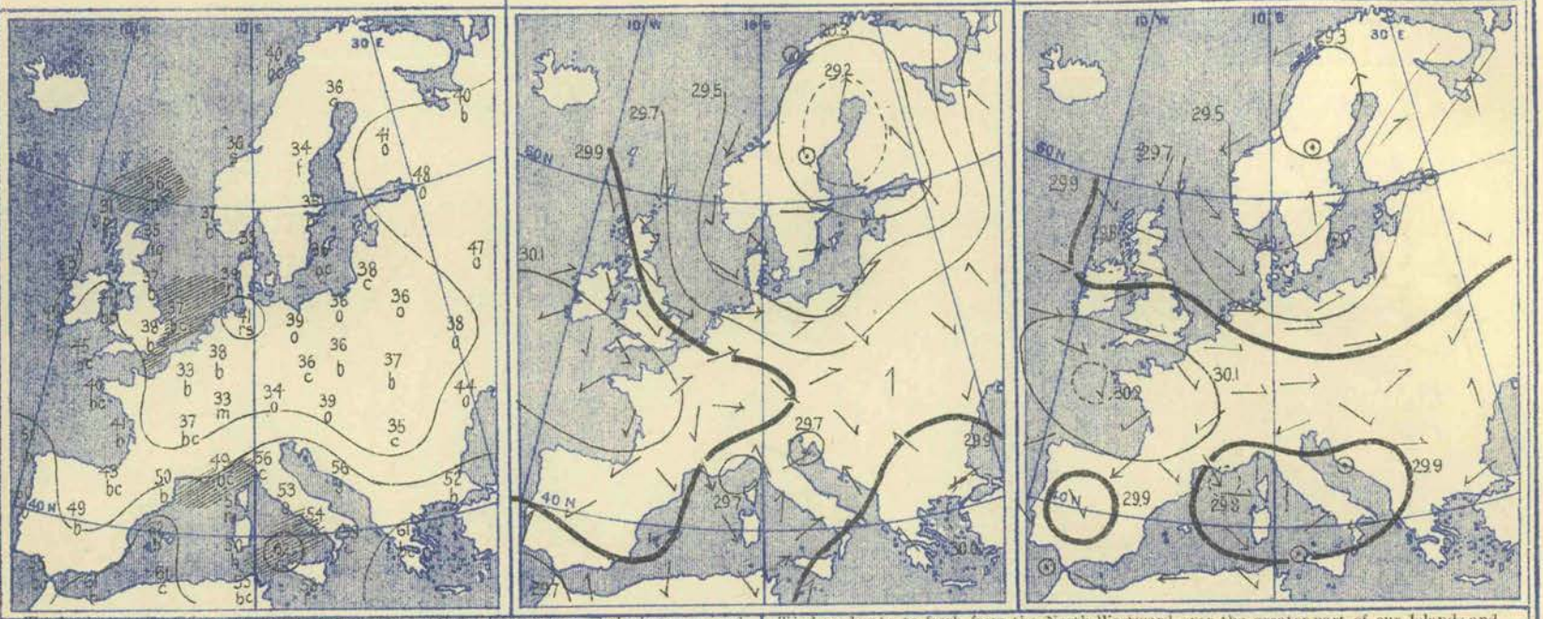
Wind cyclonic over the whole of northern and north-western Europe, the North-Westerly current in our Islands being fresh or strong in force. Separate cyclonic circulations of little strength shown over Italy and its neighbourhood. North-Westerly wind increasing in force on our coasts by evening, and reaching gale force at the Helder. Fresh complete or partial cyclonic movements appearing in different parts of Europe.

Barometer fallen except over Austria and Italy. Morning readings ranging from 30·1 ins. and upwards over the Bay of Biscay and the south-west of Ireland, and from above 29·9 ins. over central Russia, to below 29·7 ins. in a complex disturbance over Sardinia, Corsica, and the north of Italy, to 29·3 ins. in a small minima near Skudesnaes, and to below 29·2 ins. in a large system over Lapland. Northern disturbances apparently moving south-eastwards later, and a considerable depression forming over central Spain.

Tuesday, 14th April, 1903.

Temperature and Weather. 8 a.m.

Barometer and Wind. 8 a.m. | 6 p.m.



Weather in morning fair or fine over western and southern Europe as a whole, but snow and hail showers reported in the north of Scotland; snow falling also at Christiansund. Cloudy or dull in the eastern and central countries, with rain or sleet over Denmark and North Germany. Snow or sleet falling later in all the more northern parts of the United Kingdom—heavily in places—and rain in the south of our Islands, as well as over Denmark, Germany, and the north of France.

Temperature fallen in France and Spain, risen over Italy. Morning readings highest, 62° at Palma and Palermo, 61° at Nemours, Oran, and Algiers; above 55° at most of the Mediterranean and Spanish coast stations. Lowest, (1) 31° at Stornoway, and 34° at Newton Reigny; (2) 32° at Hango, and 34° at Hernösand and Karlstad; (3) 33° at Paris and Belfort, below 40° in all the more northern, eastern, and central parts of our Islands. Daily maxima below 45° at several of our northern stations, and below 50° over the United Kingdom generally; thermometer exceeding 60° in most parts of southern Europe, and exceeding 70° in Spain and Sicily, the highest reading recorded being 81° at Madrid.

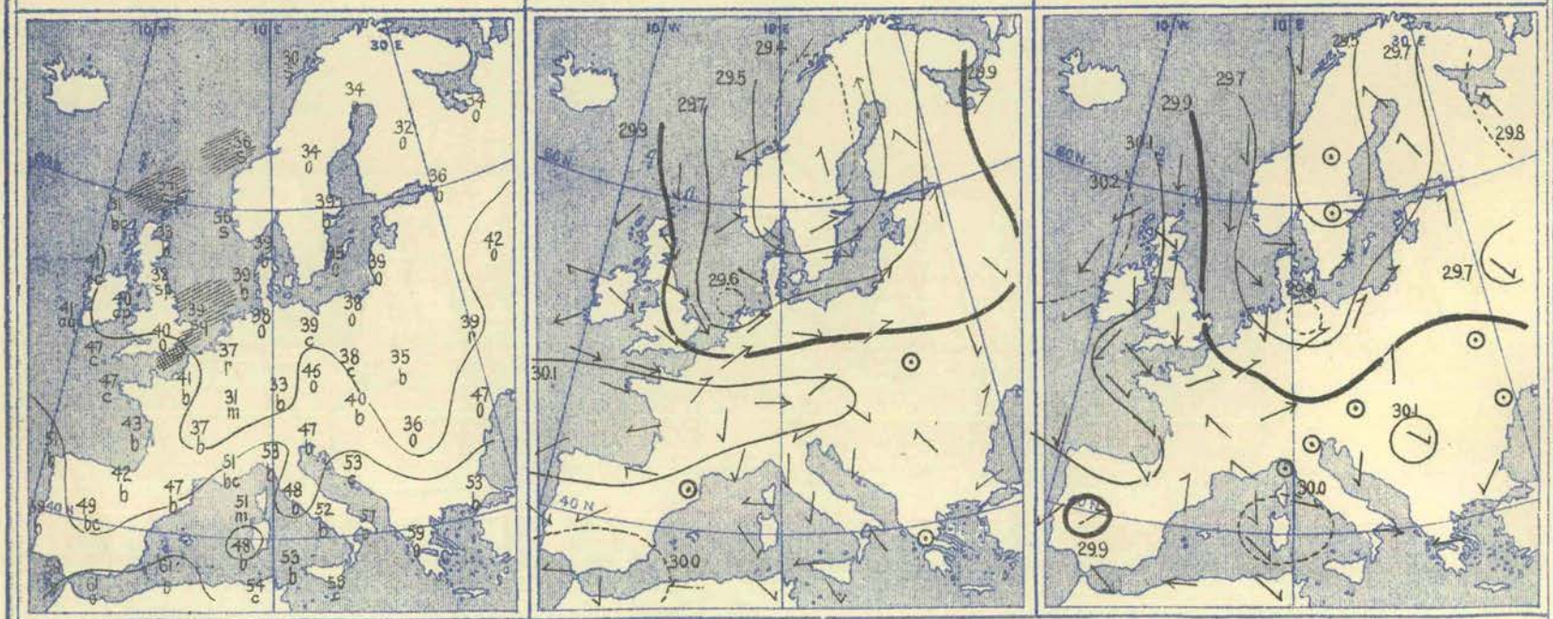
Wind moderate to fresh from the North-Westward over the greater part of our Islands and the North Sea, but variable or South-Westerly in the west of Ireland; light from the North-Eastward over Spain and the Bay of Biscay. South-Westerly or Southerly over Germany and the Baltic; South-Easterly in Russia. Light from the South-Westward in Italy, and from the Eastward or South-Eastward in Greece. Subsequently backing to the Westward or South-Westward over the greater part of England and Ireland; no decided change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in an anticyclone extending from the Atlantic over the south-west of our Islands and the west of France. Lowest, 29·2 ins. and less in a cyclonic area lying over Finland and the Gulf of Bothnia; 29·6 ins. and less to 29·8 ins. in another system over the northern parts of Italy and the Adriatic and the adjacent parts of the Mediterranean. Cyclonic system over Finland subsequently moving slowly northwards; small secondary disturbance advancing from the Atlantic to the extreme north of Ireland, and moving across the north of England at night.

Wednesday, 15th April, 1903.

Temperature and Weather. 8 a.m.

Barometer and Wind. 8 a.m. | 6 p.m.



Weather in morning variable over the United Kingdom, fine in most southern regions, and in a few isolated parts of central Europe. Cloudy or dull elsewhere. Rain or snow falling in the west of Norway, in various British localities, at Brussels, Münster and Kieff. Rain, hail, or snow experienced later in most parts of our Islands, the north and east of France, over the Netherlands, Germany, and in several Russian and Scandinavian districts.

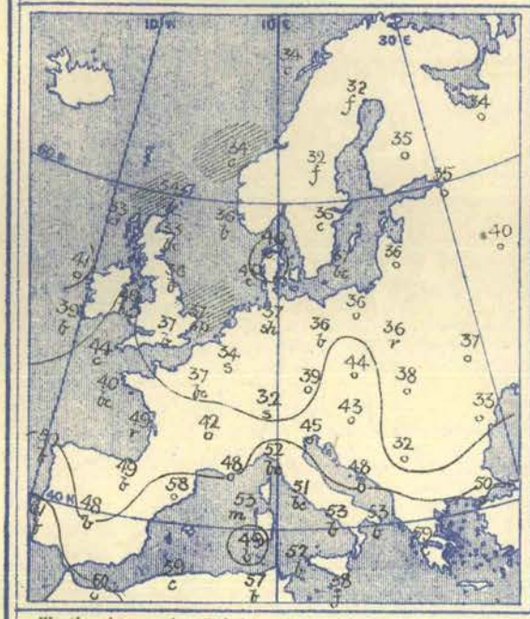
Temperature showing no general change, but fallen in Italy and Russia. Morning readings highest, 61° at Algiers and Oran, 59° at Lisbon, San Fernando and Patras, 57° at Brindisi, and 54° at Cape Sicié. Lowest, 30° at Bodö and Le Mans, 31° at Belfort, 32° at Kuopio and North Shields, and below 40° over nearly all the more northern parts of our area. Exceeding 60° during day at some stations in Italy and the south of France, rising to 70° at Constantinople and Cagliari, 73° at Nemours, and 77° at Madrid. Not touching 50° over the greater portion of central Europe and our Islands.

Wind in morning showing an extensive but irregular cyclonic movement over north-western Europe, the North-Westerly to Westerly current in our Islands and the Netherlands being fresh or strong in force. Light and rather variable winds in the south and over the Mediterranean, but mainly from East or North-East. Very little change later.

Barometer risen generally, but fallen over Ireland, England, and the Netherlands. Morning readings highest, 30·1 ins. and upwards, in a tongue of high pressure extending from the Atlantic, across France, to Buda-Pesth. Lowest, 29·4 ins. and less in a shallow depression over Scandinavia. Below 29·6 ins. in a small system over the north of Holland. Both disturbances moving eastwards later, and another local depression forming over central Spain. Pressure giving way over France and central Europe, and becoming highest over our own north-west coasts.

Thursday, 16th April, 1903.

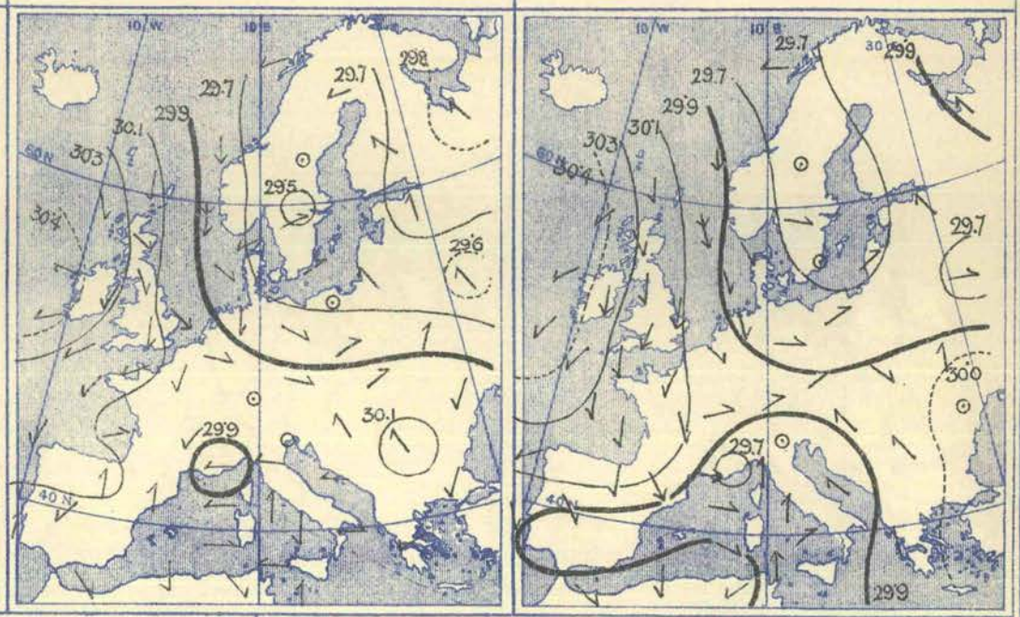
Temperature and Weather. 8 a.m.



Weather in morning fine in most parts of our Islands, and over southern Europe and the Mediterranean, and also in the extreme north of Scandinavia. Cloudy or dull elsewhere, with rain at Rochefort and Warsaw, and snow at Brussels, Breslau, and Helsingfors. Showers of snow on our own east coast and at Cuxhaven, and of hail in the north of Ireland. Snow or hail showers continuing all day in various parts of our Islands, and rain or snow falling in many Continental localities—heaviest amount 0·67 in. at Florence.

Temperature changed little and irregularly. Morning readings ranging from 61° at Lisbon and Aumale, 60° at Oran, 59° at Athens, and 58° at Barcelona, to below 40° in almost all the more central and northern regions. Lowest readings, 32° at Hernösand, Hermanstadt, Munich, and Newton Reigny, and 31° at Belfort. Sharp frost experienced in most inland districts during night, but maximum readings above 45° in most parts of our Islands, above 60° in Italy and the south of France, as high as 72° at Patras, 73° at Tunis, and 79° at Madrid and Oporto.

Barometer and Wind. 8 a.m. 6 p.m.

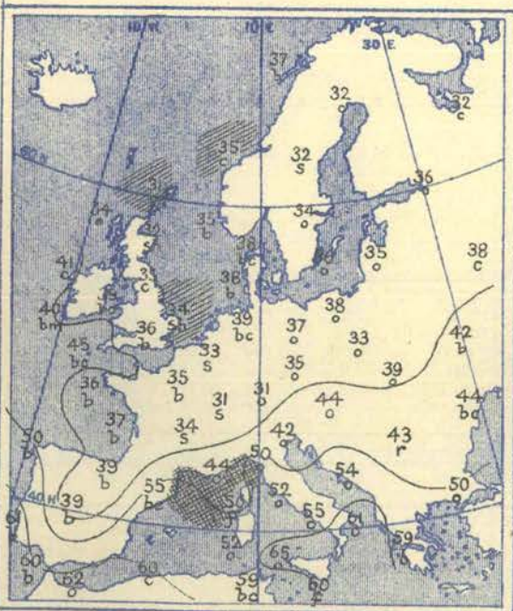


Wind Northerly (North-West to North-East) over the western half of our area, and fresh or strong in places, drawing into South-West or South over the Baltic and the Gulf of Finland, and into East at Bodö and Haparanda. Light and variable over the south-eastern countries and Italy. Very little change as a whole later, but a cyclonic circulation of increasing energy setting in around the Gulf of Genoa and its neighbourhood.

Barometer risen in the most north-eastern countries, fallen elsewhere. Readings at 8 a.m. ranging from 30·4 ins. and upwards over and to the westward of Ireland, to 29·9 ins. and less in a depression over the Gulf of Genoa and its vicinity, 29·6 ins. in another disturbance near Moscow, and to 29·5 ins. in a third system over the west of Sweden. Barometer continuing to rise in the north-western regions, and most Continental cyclonic systems tending to disperse. That over the Gulf of Genoa, however, becoming much deeper, and its gradients steep.

Friday, 17th April, 1903.

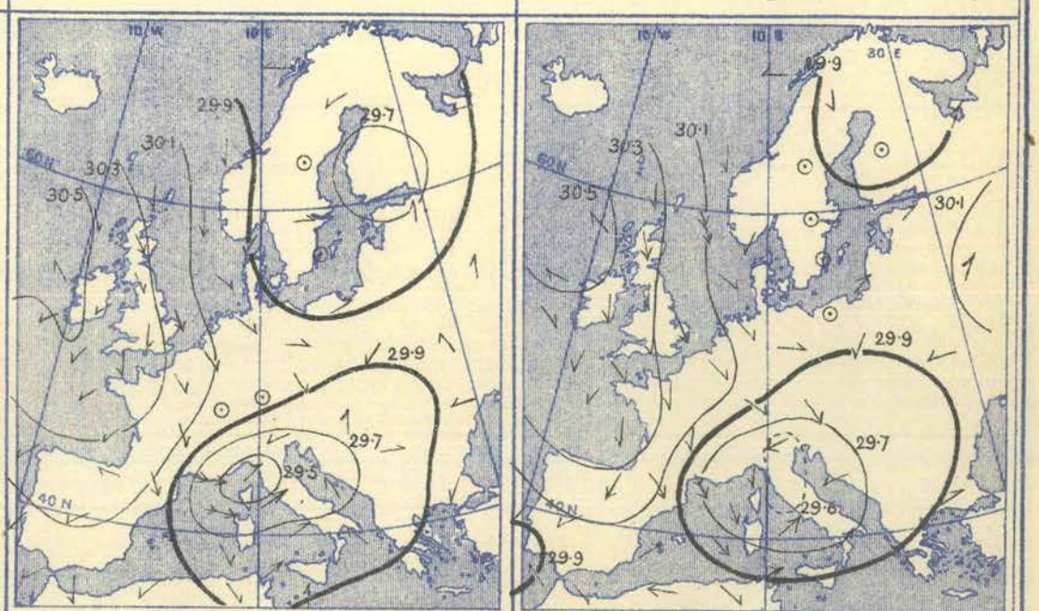
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over the Iberian and Scandinavian Peninsulas, Denmark and the greater part of the United Kingdom and France; cloudy or dull in most other regions, with snow showers along our eastern coasts, rain at Hermanstadt and Vienna, and snow at Brussels, Belfort, and Lyons. Rain or snow becoming general in most central European localities later, and rain over Italy and the Adriatic—largest amounts, 0·8 in. at Vienna, 0·9 in. at Trieste, and 1·0 in. at Lesina. As much as 0·3 in. of snow at Wick, and 0·15 in. at Yarmouth.

Temperature fallen decidedly over France and the north of Italy, risen quickly in Sicily. Morning readings ranging from 65° at Palermo, 62° at Oran, and 61° at Lisbon and Brindisi, to below 50° in the Riviera, and to below 40° over the greater part of our area. Lowest reading of all, 31° in the Shetlands. Rising during day to 70° at Madrid, Patras, and Palermo, 72° at Brindisi, 73° at San Fernando, and 75° at Lisbon. Remaining very low generally, and only touching 46° at Cette and Cape Sicié, and 48° at Marseilles.

Barometer and Wind. 8 a.m. 6 p.m.

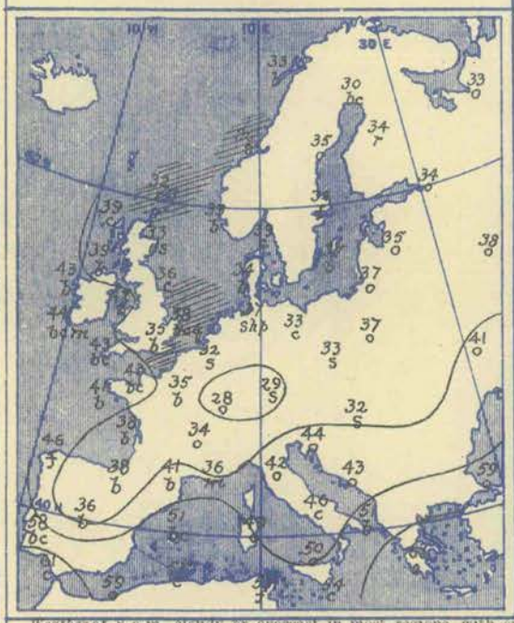


Wind in morning Northerly (North-West to North-East) over all the countries bordering the Atlantic, and light to fresh in force. Two complete cyclonic circulations shown—one of light winds around Finland, and the other of strong winds or gales around the Gulf of Genoa. Latter movement continuing very strong all day and extending eastwards to the whole of Italy and the Adriatic. Not much change over our area generally, but Northerly wind increasing to a gale at Skudesnaes.

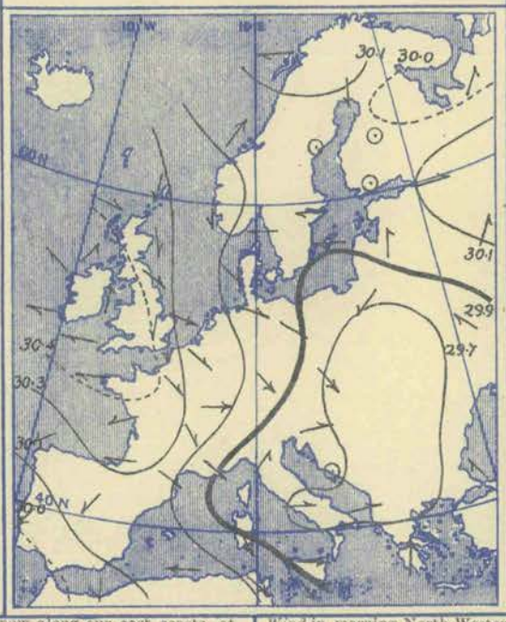
Barometer risen over the northern and north-western countries, fallen elsewhere. Readings at 8 a.m. ranging from above 30·5 ins. over and to the westward of Ireland, and from 30·1 ins. in the south-east of Russia, to below 29·7 ins. in a shallow disturbance over Finland, and to 29·5 ins. and less in a very deep system over the Gulf of Genoa. Former depression tending to disperse later, and the latter moving eastwards and becoming less well-defined. Very little change elsewhere. Gradients for North-West winds very steep all day over the south-east of France.

Saturday, 18th April, 1903.

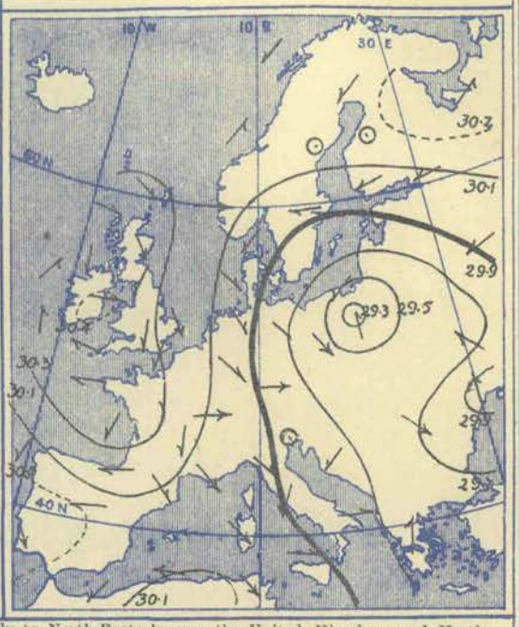
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast in most regions, with snow along our east coasts, at Brussels, Christiansund, and in many parts of central Europe, and rain in Finland and at Pesaro. Fine and bright over the Spanish Peninsula, France, the majority of our own stations, and in various parts of Scandinavia. Snow showers later at several of our northern and eastern stations, and heavy falls over central Europe—as much as 0·7 in. at Memel, and 1·4 ins. at Breslau. Rain falling in the south of Italy—heaviest amount 0·5 in. at Brindisi.

Temperature fallen briskly over Italy and the Mediterranean. Morning readings ranging from 63° at Patras, 61° at San Fernando, 58° at Lisbon, and 54° at Malta, to below 50° in nearly all other regions, including Italy, and to below 40° over the northern half of Europe generally. Lowest readings of all, 30° at Haparanda, 29° at Munich, and 28° at Belfort. Maxima during day as high as 77° at Constantinople, 72° at Madrid, and 70° at Lisbon, but below 60° over Italy, and below 50° over the central countries and at most of our own stations. No higher than 41° at Nancy, 39° at Vienna, 37° at Nairn and Cracow, and 34° at Breslau.

Wind in morning North-Westerly to North-Easterly over the United Kingdom, and North-Easterly to Easterly over Spain and the Bay of Biscay. Variable over northern Europe and irregularly cyclonic over the more south-eastern countries. North-Westerly current strong at several Mediterranean stations, and a moderate Southerly gale prevailing at Athens. Cyclonic circulation working northwards during day and increasing in force—affecting all the central and eastern countries by 6 p.m. North-Westerly wind continuing strong in different parts of the Mediterranean, but Southerly gale at Athens subsiding.

Barometer at 8 a.m. highest, 30·4 ins. and upwards in an anticyclone extending from the Atlantic over the greater part of our Islands. Lowest, 29·7 ins. and less in a large and ill-defined depression stretching from Naples and Brindisi to Warsaw. Gradients steep over the south-east of France. Depression moving northwards later and becoming much deeper and well-defined, its centre at 6 p.m. being near Warsaw. Gradients decreasing over the south-east of France, but increasing over Europe generally. Barometer rising decidedly in the extreme north.

IV.—GENERAL NOTES, etc.

The distribution of barometic pressure during this period underwent several minor modifications, but the chief permanent features were,—an anticyclone off our south-west or west coasts, which, during the latter days, spread gradually over nearly the whole of our Islands, and low-pressure areas, or definite cyclonic disturbances, which moved or spread south-eastwards over Scandinavia and its neighbourhood, and depressions of various size and depth over the Mediterranean. The North-Westerly and Northerly current of wind in the rear of the northern disturbances, and especially in the rear of a small system which travelled quickly south-eastwards across our Islands on Tuesday night, was very keen, and reduced the temperature over the United Kingdom and the neighbouring portions of the Continent to many degrees below the normal, so that sharp frosts were experienced almost every night, and the daily maxima were very low. The Mediterranean depressions were mostly shallow and ill-defined, but towards the end of the week a very deep system was developed over the Gulf of Genoa, giving rise to violent gales in that region, and to heavy rains over Italy and the Adriatic. Our Islands and the northern countries generally were visited by frequent showers or steady falls of snow or hail, but they were usually heavier on the Continent than in this country. At the end of the period a depression of considerable size and of increasing energy was moving north-westwards across central Europe, and causing strong winds or gales over Germany, Austria-Hungary, and the adjacent parts of Russia, accompanied by very heavy falls of snow.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 86.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	41·6	+ 6·9	42	+ 7
STRATHPEFFER SPA	40·0	+ 6·7	40	+ 7
EDINBURGH	40·6	+ 11·9	41	+ 12
COCKLE PARK	50·8	—	52	—
NEWCASTLE-ON-TYNE	36·5	—	37	—
YORK	49·4	+ 18·1	51	+ 19
CROMER	52·4	—	54	—
LOWESTOFT	52·9	—	55	—
HOLLESLEY BAY	63·0	—	66	—
DUNMOW	61·4	—	64	—
SHEFFIELD	57·1	—	59	—
WORKSOP	54·5	+ 24·5	56	+ 25
THURCASTON	55·1	+ 23·6	57	+ 25
TUNBRIDGE WELLS	58·4	—	61	—
MARGATE	52·2	+ 16·2	54	+ 17
BROADSTAIRS				
RAMSGATE	—	—	—	—
EASTBOURNE	55·8	+ 15·6	58	+ 16
BRIGHTON	56·7	+ 16·4	59	+ 17
WORTHING	57·0	—	59	—
BOGNOR †	54·4†	—	57†	—
WATERGATE PARK	58·6	—	61	—
WESTBOURNE †	55·5†	+13·3	58†	+ 14
VENTNOR HOSPITAL	54·5	+11·5	57	+ 12
BOURNEMOUTH	67·5	—	70	—
MARLBOROUGH	44·0	+11·2	46	+ 12
SOUTHPORT	61·7	—	64	—
RHYL †	61·4	—	63	—
ABERDOVEY †	67·7†	—	71†	—
TENBY †	69·6	+26·2	73	+ 27
TORQUAY	62·5	+21·4	65	+ 22
NEWQUAY	56·1	+15·5	58	+ 16
GUERNSEY †	48·7†	+ 3·3	51†	+ 3

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending March 21st, 1903.	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	23·5	—	28	—
,, ,, April 11th, ,,	,,	—	—	—	—	—	—	—	—	—	—	—	42·9	—	46	—
,, ,, ,, ,,	Rhyl	—	—	—	—	—	—	—	—	—	—	—	30·1	—	32	—
,, ,, ,, ,,	Tenby	—	—	—	—	—	—	—	—	—	—	—	45·4	+ 4·8	49	+ 5
,, ,, ,, ,,	Bognor	—	—	—	—	—	—	—	—	—	—	—	53·8	—	58	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 16.] *Third Series.* WEEK ENDING SATURDAY, APRIL 25TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 92.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	60	24	48·2	32·0	39·7	4 below	17	−12	37	+22	185	− 9	455	− 38
	1. SCOTLAND, EAST	61	23	48·3	30·7	39·1	6 below	18	−18	41	+26	256	+ 3	473	− 74
	2. ENGLAND, N.E.	56	24	47·6	32·6	39·7	5 below	16	−19	34	+24	352	+ 95	336	−121
	3. ENGLAND, EAST	61	24	49·5	32·8	40·8	6 below	21	−25	35	+25	423	+ 96	322*	−180
	4. MIDLAND COUNTIES	60	25	51·1	30·6	40·3	6 below	25	−22	42	+29	396	+ 43	351	−157
	5. ENGLAND, SOUTH	61	24	51·8	34·1	42·5	5 below	37	−13	22	+16	446	+ 68	208	−168
Principal Grazing Districts.	6. SCOTLAND, WEST	56	25	49·8	31·6	40·3	6 below	22	−18	40	+30	293	+ 18	310	− 81
	7. ENGLAND, N.W.	58	26	49·6	33·9	41·4	6 below	21	−19	31	+23	357	+ 70	258	−116
	8. ENGLAND, S.W.	61	28	51·8	35·2	43·1	5 below	36	−11	19	+15	463	+ 72	162	−130
	9. IRELAND, NORTH	55	26	49·7	36·1	42·5	4 below	28	−14	17	+10	331	− 14	287	− 45
	10. IRELAND, SOUTH	56	27	51·5	36·5	43·6	5 below	34	−15	15	+11	480	+ 32	183	− 59
	— CHANNEL ISLANDS	55	32	51·7	40·0	45·6	4 below	34	−19	6	+ 5	596	+102	49	− 67

Rainfall.

	DISTRICTS. (See p. 92.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	2	5 less	88	+17	27·4	+12·0
	1. SCOTLAND, EAST	2	1	3 less	71	+12	13·3	+ 4·8
	2. ENGLAND, N.E.	2	1	3 less	57	+ 1	6·0	− 0·5
	3. ENGLAND, EAST	1	1	3 less	51	− 6	5·2	− 0·9
	4. MIDLAND COUNTIES	1	2	2 less	54	0	7·8	+ 0·4
	5. ENGLAND, SOUTH	2	4	0 (average)	59	+ 6	7·4	− 0·4
Principal Grazing Districts.	6. SCOTLAND, WEST	1	1	6 less	83	+20	23·7	+ 8·8
	7. ENGLAND, N.W.	1	1	4 less	70	+12	12·4	+ 3·5
	8. ENGLAND, S.W.	1	7	2 more	68	+ 7	13·2	+ 1·8
	9. IRELAND, NORTH	3	3	2 more	85	+15	15·3	+ 5·5
	10. IRELAND, SOUTH	4	5	1 less	79	+15	16·3	+ 4·1
	— CHANNEL ISLANDS	3	4	1 less	73	+ 8	9·4	− 0·1

Bright Sunshine.

	DISTRICTS. (See p. 92.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	38	+ 4	37	+ 4	234	− 58	20	− 5
	1. SCOTLAND, EAST	42	+ 7	41	+ 7	297	− 32	25	− 3
	2. ENGLAND, N.E.	43	+ 7	43	+ 7	330	− 14	28	− 1
	3. ENGLAND, EAST	38	0	38	0	393	+ 13	24	+ 1
	4. MIDLAND COUNTIES	41	+10	41	+10	332	+ 8	28	+ 1
	5. ENGLAND, SOUTH	42	+ 1	42	+ 1	381	+ 3	31	0
Principal Grazing Districts.	6. SCOTLAND, WEST	41	− 4	40	− 4	288	− 45	24	− 4
	7. ENGLAND, N.W.	52	+18	52	+18	339	+ 13	28	+ 1
	8. ENGLAND, S.W.	47	+ 2	47	+ 2	357	− 47	29	− 4
	9. IRELAND, NORTH	19	−16	19	−16	278	− 52	23	− 4
	10. IRELAND, SOUTH	30	− 9	30	− 9	309	− 69	26	− 6
	— CHANNEL ISLANDS	47	0	48	0	446	− 8	37	− 1

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week varied a good deal. On most days it was again very cold and dry, with a large amount of sunshine, showers of snow or graupel being, however, often experienced over the eastern half of the Kingdom, and occasionally in the western districts also. By the end of the week steady rain had set in over all the western and southern parts of the Kingdom.

Temperature continued below the mean, the deficit ranging from 4° in Scotland N., Ireland N., and the Channel Islands, to 5° or 6° elsewhere. It was comparatively high in most places on Monday and Saturday, the maxima on the latter day varying from 60° or 61° in most parts of the Kingdom, to 55° in Scotland N. and the Channel Islands. The lowest of the minima were registered on rather irregular dates, and ranged from 23° in Scotland E., and from between 24° and 28° over the country as a whole, to 32° at Jersey. Frost was recorded frequently both by the sheltered and exposed thermometers in most inland districts, the lowest grass reading reported being 13° at Worksop.

Rainfall was less than the mean very generally, but just equal to it in England S., and rather more in England S.W. and Ireland N. At several stations in Great Britain the week was altogether rainless.

Bright Sunshine exceeded the normal in nearly all English and Scotch districts, and equalled it in the Channel Islands and England E. Over Ireland, however, and in Scotland W. there was a deficit. The percentage of the possible duration ranged from 52 in England N.W., 48 in the Channel Islands, and 47 in England S.W., to 30 in Ireland S., and to only 19 in Ireland N.

Barometer and Wind.—The relative positions of the anticyclonic and low-pressure areas over our Islands and their neighbourhood changed frequently during this period. No well-defined disturbance passed immediately over the Kingdom, but the wind and weather were much affected by a system which by Thursday reached the west of France from the west-north-westward, and which subsequently moved eastwards and northwards until it lay near Bremen, and finally westwards to the Netherlands, where it gradually dispersed. The passage of this system caused moderate to fresh or strong Northerly (North-Westerly to North-Easterly) winds to prevail for some days over the major portion of our Islands, but by Saturday, on the advance of a depression from the Atlantic, the wind backed to the Southward or South-Westward at all except our most northern and south-eastern stations.

207 | 90 Wy. & S. Ltd.
319 | 70 12 | 02

II.—DATA from which the SUMMARY on page 91 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	47	31	44·0	33·1	38·3	− 3·9	6	31	4	0·34	− 0·11	*	*	*	*
	Stornoway	54	34	49·4	35·3	42·0	− 1·9	21	19	3	0·11	− 0·46	36·2	− 2·3	35	− 2
	Wick	49	26	45·6	32·6	38·8	− 5·2	10	33	3	0·48	+ 0·10	*	*	*	*
	Lairg Ⓢ	57	24	49·7	28·4	38·5	− 4·5	22	49	2	0·09	− 0·45	*	*	*	*
	Glencarron Ⓢ	58	29	48·7	30·1	39·0	− 4·7	19	44	0	0·00	− 1·03	*	*	*	*
	Fort Augustus Ⓢ	60	25	50·7	30·9	40·3	− 5·2	24	41	0	0·00	− 0·47	26·4	− 1·7	26	− 2
	Fort William	55	29	49·0	33·6	40·9	− 5·1	20	32	0	0·00	− 0·81	30·5	− 3·3	30	− 3
1. SCOTLAND, E.	Nairn	61	25	49·7	30·0	39·4	− 5·6	22	44	4	0·07	− 0·23	*	*	*	*
	Aberdeen	50	29	45·0	32·0	38·2	− 6·6	8	35	3	0·17	− 0·30	51·0	+ 13·3	50	+ 13
	Braemar Ⓢ	54	23	45·8	27·9	36·4	− 5·5	11	49	3	0·27	− 0·23	*	*	*	*
	Ochtertyre Ⓢ	60	26	51·9	30·3	40·6	− 5·1	28	44	1	0·07	− 0·45	*	*	*	*
	Leith	55	30	50·3	32·9	41·2	− 4·8	23	35	1	0·09	− 0·26	*	*	*	*
	Marchmont Ⓢ	55	28	46·9	31·1	38·6	− 5·4	14	39	2	0·15	− 0·38	41·3	+ 6·5	41	+ 6
2. ENGLAND, N.E.	Alnwick Castle	52	26	47·5	31·4	39·1	− 4·8	15	39	2	0·18	− 0·29	*	*	*	*
	Durham	54	25	48·1	29·7	38·5	− 6·2	17	45	4	0·19	− 0·25	39·7	+ 8·5	39	+ 8
	Shields	50	33	46·0	34·3	39·9	− 4·8	11	28	3	0·18	− 0·19	*	*	*	*
	Scarborough Ⓜ	51	29	45·5	32·7	38·8	− 6·6	10	33	2	0·04	− 0·36	47·5	—	47	—
	Spurn Head	52	35	47·6	36·7	41·9	− 3·6	16	21	2	0·09	− 0·22	*	*	*	*
	Fulbeck (Lincolnshire)	56	24	50·7	30·7	40·2	− 6·1	24	42	0	0·00	− 0·39	40·3	—	40	—
3. ENGLAND, E.	Hillington Ⓜ	56	30	49·9	34·2	41·7	− 5·1	22	30	0	0·00	− 0·40	45·1	+ 6·9	45	+ 7
	Yarmouth	52	28	46·4	35·4	40·6	− 4·9	12	24	2	0·03	− 0·35	*	*	*	*
	Geldeston	55	28	48·0	33·6	40·5	− 6·1	17	32	2	0·06	− 0·30	30·2	− 9·9	30	− 10
	Cambridge	61	26	53·9	30·8	41·8	− 6·0	33	44	1	0·11	− 0·24	42·0	+ 3·2	42	+ 3
	Felixstowe	58	30	48·1	33·9	40·7	− 6·4	17	31	2	0·16	—	35·8†	—	36†	—
	Rothamsted	57	24	49·9	29·0	39·0	− 7·5	22	48	1	0·10	− 0·34	35·2	− 1·5	36	− 2
	Shoeburyness	59	30	50·0	33·0	41·1	− 6·7	22	34	1	0·05	− 0·25	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	54	28	49·4	30·3	39·4	− 5·6	21	43	2	0·02	− 0·48	41·8	—	41	—
	Bawtry (Hesley Hall)	58	26	52·9	30·0	40·9	− 6·1	31	46	0	0·00	− 0·39	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	58	26	51·9	30·0	40·4	− 6·9	28	45	1	0·02	− 0·36	*	*	*	*
	Cheadle Ⓜ	57	29	49·5	31·9	40·3	− 5·4	21	38	0	0·00	− 0·47	*	*	*	*
	Birmingham (Edgbaston)	57	30	50·4	32·7	41·1	− 5·2	24	35	0	0·00	− 0·45	32·4	—	32	—
	Churchstoke Ⓜ	58	27	50·8	29·4	39·6	− 5·8	25	48	2	0·29	− 0·14	51·7	+ 15·2	52	+ 15
	Hereford Ⓜ	60	28	52·3	30·8	41·0	− 6·4	29	43	1	0·54	+ 0·14	*	*	*	*
	Cirencester	56	25	50·5	29·2	39·3	− 7·0	24	47	1	0·58	+ 0·13	57·1	+ 18·5	58	+ 19
	Oxford	59	28	51·9	30·7	40·8	− 6·9	28	43	1	0·30	− 0·07	44·3	+ 7·0	45	+ 7
5. ENGLAND, S.	London	60	30	53·0	33·6	42·8	− 6·2	41	24	1	0·26	− 0·12	25·8‡	− 6·4‡	26‡	− 6‡
	Swarraton (Alresford) Ⓜ	57	24	51·9	29·4	40·1	− 6·3	28	47	1	0·47	+ 0·04	*	*	*	*
	Dungeness	57	30	50·0	35·3	42·3	− 5·0	30	19	3	0·17	− 0·14	34·9	—	35	—
	Hastings (St. Leonards)	55	30	48·4	35·4	41·6	− 6·1	18	25	1	0·18	− 0·23	31·2	− 12·0	32	− 12
	Southampton	61	31	55·1	34·3	44·2	− 4·9	48	22	2	0·46	+ 0·02	53·5	+ 12·0	54	+ 12
	Portland Bill	53	32	51·6	37·6	44·3	− 4·6	35	12	2	0·67	—	*	*	*	*
	Shaftesbury Ⓜ	57	30	52·8	33·1	42·5	− 4·4	41	25	2	0·56	0·00	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	54	28	49·5	32·5	40·6	− 5·9	21	36	0	0·00	− 0·85	*	*	*	*
	Glasgow	56	30	49·6	32·5	40·6	− 5·1	21	35	1	0·01	− 0·48	20·4	− 11·1	20	− 11
	Cally Ⓢ	52	25	50·6	28·6	39·1	− 6·8	24	49	1	0·04	− 0·55	*	*	*	*
	Aspatria	55	27	50·2	32·0	40·7	− 4·7	23	38	0	0·00	—	54·6	—	54	—
	Douglas (Isle of Man)	52	29	49·0	32·3	40·3	− 6·0	20	36	3	0·23	− 0·31	47·0	+ 3·0	47	+ 3
7. ENGLAND, N.W.	Newton Reigny	58	27	53·9	31·7	42·3	− 2·1	51	29	2	0·06	—	43·4	—	43	—
	Stonyhurst	51	30	47·3	32·6	39·6	− 6·6	15	34	0	0·00	− 0·54	53·7	+ 17·3	53	+ 17
	Blackpool Ⓜ	53	26	48·6	31·1	39·4	− 7·4	18	40	1	0·01	− 0·39	51·2	+ 14·0	51	+ 14
	Manchester (Prestwich)	58	28	50·2	30·8	40·0	− 6·3	23	41	0	0·00	− 0·46	42·9	—	43	—
	Liverpool Obsy. (Bidston)	54	31	48·3	35·7	41·7	− 5·9	18	24	2	0·07	− 0·29	50·3	—	50	—
	Chester (Hawarden Bridge)	57	30	51·1	34·0	42·1	− 6·0	34	22	0	0·00	—	*	*	*	*
	Llandudno Ⓜ	54	34	49·2	37·1	42·9	− 5·0	27	14	0	0·00	− 0·41	60·7	+ 22·8	61	+ 23
	Holyhead	52	35	48·3	38·0	42·9	− 4·6	23	11	1	0·27	− 0·17	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	51	34	49·3	37·6	43·2	− 3·9	27	12	1	0·68	+ 0·23	47·8	+ 3·8	48	+ 4
	Clifton	57	33	52·9	34·9	43·5	− 4·2	40	20	1	1·04	+ 0·53	*	*	*	*
	Bath	58	28	52·7	31·4	41·5	− 6·8	30	41	1	0·60	+ 0·13	57·1	—	58	—
	Arlington (N. Devon)	54	30	50·1	33·3	41·3	− 4·8	23	33	1	0·90	+ 0·24	*	*	*	*
	Cullompton Ⓜ	61	28	54·3	32·9	43·1	− 5·6	46	25	2	0·75	+ 0·21	40·8	+ 2·5	41	+ 3
	Falmouth	54	35	50·5	39·1	44·5	− 4·0	30	8	2	0·44	− 0·21	42·0	− 2·4	42	− 2
	Plymouth	54	33	52·5	37·1	44·4	− 4·9	37	14	1	0·43	− 0·10	46·0	+ 3·8	46	+ 4
9. IRELAND, N.	Malin Head	52	35	48·3	38·4	43·1	− 3·4	23	10	1	0·02	− 0·42	*	*	*	*
	Edenfel (Omagh)	53	27	49·6	33·7	41·3	− 4·4	21	32	2	0·35	− 0·19	*	*	*	*
	Blacksod Point	51	36	49·6	41·4	45·3	− 2·7	26	2	6	0·69	+ 0·04	*	*	*	*
	Markree Castle	55	26	51·0	33·7	41·9	− 4·6	25	32	3	0·63	+ 0·08	19·7	− 16·1	20	− 16
	Armagh	55	29	49·6	34·7	41·8	− 4·6	21	28	3	0·24	− 0·24	18·5	− 16·2	18	− 16
	Donaghadee	53	32	49·9	34·4	41·8	− 4·7	22	30	2	0·04	− 0·41	*	*	*	*
10. IRELAND, S.	Dublin	55	34	51·1	37·5	44·0	− 4·2	33	13	4	0·40	− 0·05	28·2	− 11·9	28	− 12
	Birr Castle	55	27	51·4	33·3	41·9	− 5·5	26	34	3	0·28	− 0·22	30·4	− 6·6	30	− 7
	Kilkenny	54	29	51·1	34·1	42·2	− 5·7	35	22	3	0·52	0·00	*	*	*	*
	Waterford	55	29	51·7	35·1	43·0	− 4·3	36	19	3	0·45	− 0·12	*	*	*	*
	Roche's Point	52	35	50·4	39·7	44·8	− 4·2	29	6	5	0·35	− 0·35	*	*	*	*
	Valencia	55	33	52·0	40·0	45·7	− 3·4	34	6	6	0·74	− 0·09	30·7	− 9·5	31	− 10
	Killarney	56	30	52·3	37·1	44·3	− 3·9	37	14	2	0·49	− 0·28	*	*	*	*
	Foynes	56	31	51·7	35·1	43·0	− 4·7	36	19	3	0·83	+ 0·26	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	38	51·3	40·6	45·7	− 3·6	32	4	3	0·39	− 0·08	45·9	+ 1·4	47	+ 1
	Jersey	55	32	52·0	39·4	45·4	− 4·7	35	7	3	0·43	− 0·01	47·1	− 0·5	48	− 1

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

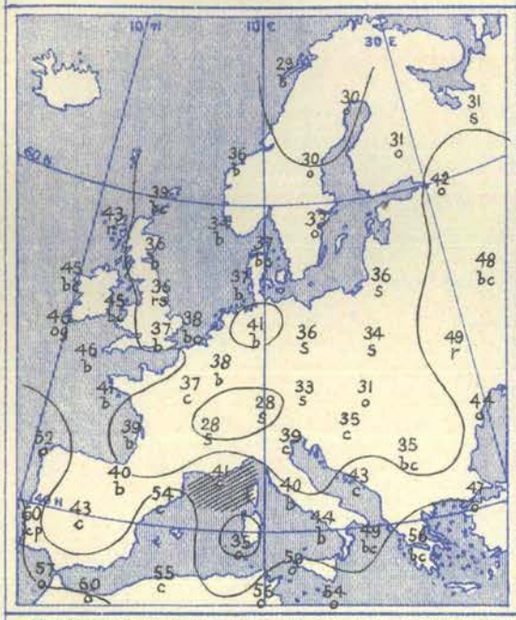
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 19th April, 1903.

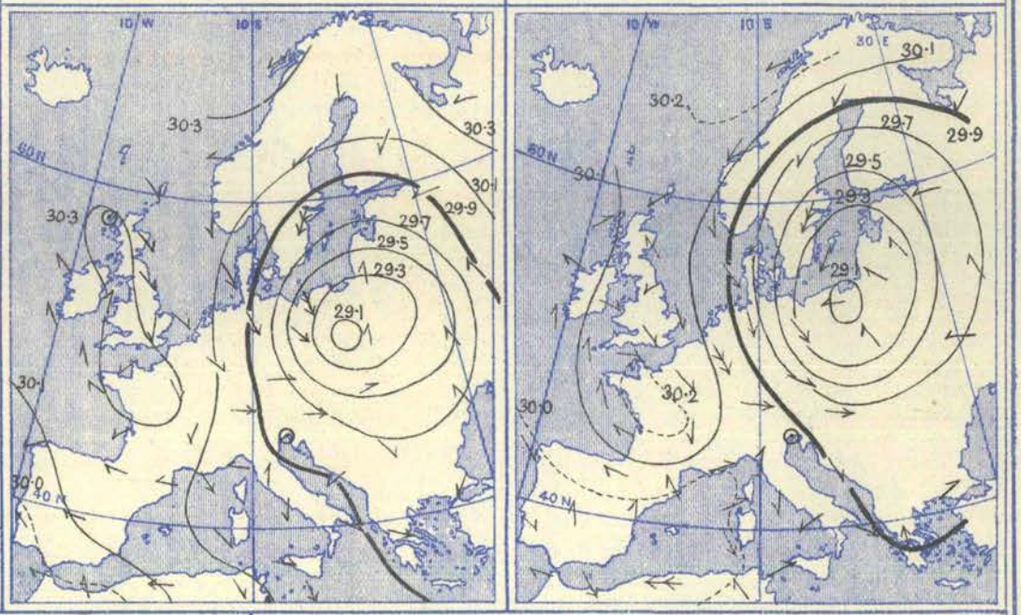
Temperature and Weather. 8 a.m.



Weather in morning fair or fine over western and southern Europe generally, but rainy in the Hebrides; sleet reported at Shields. Dull in the northern, eastern, and central countries, with heavy snow in many parts of Germany and Austria. Snow or sleet showers falling later at several of our own northern and eastern stations; heavy snow reported in Sweden and Germany, and slight rain in the Netherlands. Thunderstorm occurring at Algiers at night.

Temperature risen in most of the western and northern countries, but fallen in Russia and Italy. Morning readings highest, 61° at Oporto, and 60° at Lisbon and Nemours, and 59° at Oran; above 50° at many of the Mediterranean stations. Lowest, (1) 28° at Belfort and Munich, and 31° at Cracow; (2) 29° at Bodö, and 30° at Haparanda and Hernösand; lowest in our Islands, 35° at Nairn. Rising during day to 50° and upwards in the western and southern parts of the United Kingdom, and to 55° at Jersey, but remaining below 45° on our north and east coasts. Exceeding 60° over Spain and the south of France, and reaching 70° at Madrid and San Fernando.

Barometer and Wind. 8 a.m. and 6 p.m.

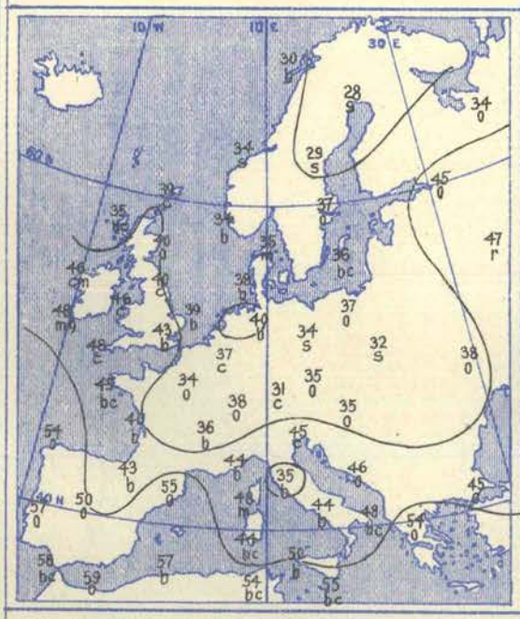


Wind Northerly or North-Easterly over Scandinavia, Denmark, and northern Russia, with a gale at Stockholm; light from the North-Westward on the east coasts of Great Britain and in the Netherlands; strong from West or North-West in Germany, with a gale at Swinemunde; light from South-East over central and southern Russia. Easterly or South-Easterly over Spain, the west of France, and the extreme south-west and west of our own Islands; Westerly in Italy and Greece. Northerly gales setting in later over a considerable portion of Sweden, Denmark, and the Baltic; no important change occurring elsewhere.

Barometer highest, 30·3 ins. or rather more to 30·1 ins. in an anticyclone covering nearly the whole of western Europe. Lowest, 29·1 ins. and less in a deep cyclonic system with its centre over eastern Germany; gradients steep over Germany, Denmark, the Baltic, and the south of Sweden. Anticyclone giving way gradually during day; cyclonic disturbance over Germany moving very slowly northwards.

Monday, 20th April, 1903.

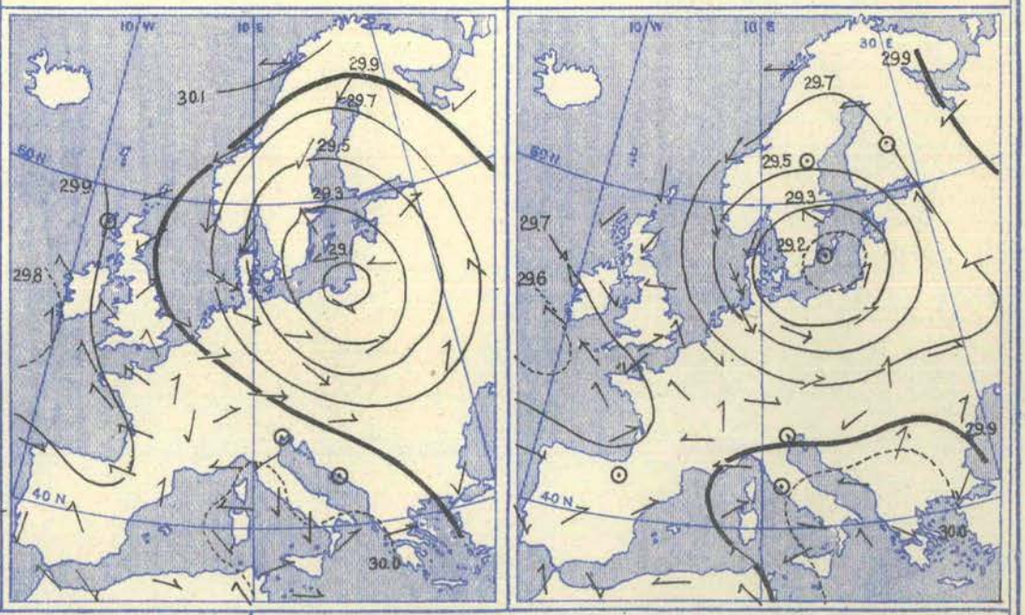
Temperature and Weather. 8 a.m.



Weather at 8 a.m. cloudy or dull generally, with rain at Moscow and snow over Sweden and central Europe. Fine and bright over our southern and south-eastern counties and in various parts of France and southern Europe. Rain or snow falling later in France, at most of our own northern stations, and over Russia and Scandinavia. Amounts rather heavy at Wick, Moscow, and in Sweden.

Temperature changed irregularly. Morning readings highest, 59° at Aumale and Oran, 57° on the coast of Portugal, 55° at Barcelona, and 54° at Athens. Lowest, 28° at Haparanda, 29° at Hernösand and Karlstad, 31° at Munich, 34° at Paris, 35° at Rome and Florence. No higher than 44° at Cagliari. Rising later to 58° in London, to above 60° over the west and south-west of France, to 68° at Madrid, 70° at San Fernando, and to 73° at Tunis. Maxima very low for season over central countries—only 39° at Cracow and Breslau.

Barometer and Wind. 8 a.m. and 6 p.m.

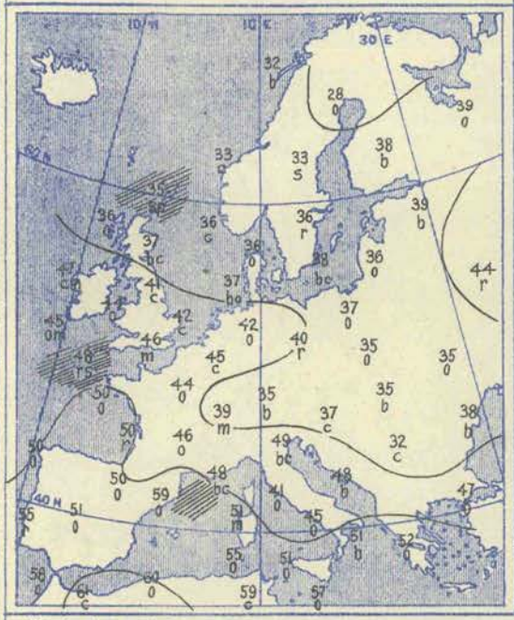


Wind in morning showing a complete cyclonic circulation around the Baltic, the Northerly and North-Westerly winds in Sweden and Denmark being strong to a gale. Moderate or light from South-East on our west and south-west coasts, and light and variable over most parts of southern Europe. No important change later.

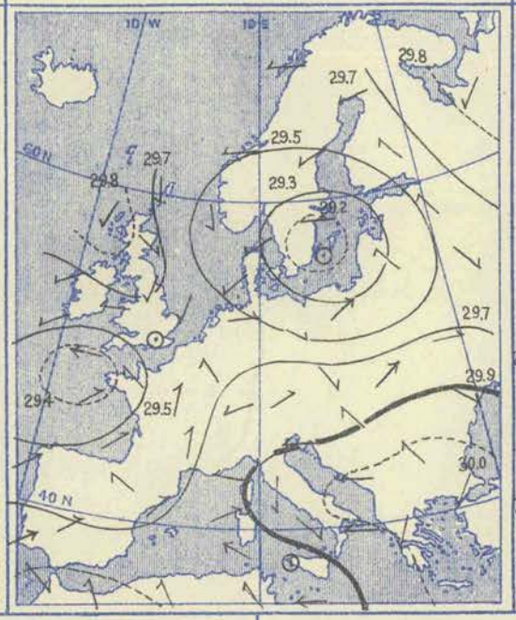
Barometer fallen except in some south-eastern and southern localities. Readings at 8 a.m. ranging from 30·10 ins. at Bodö, and from above 30·0 ins. in a large irregularly shaped area embracing the major portions of France, Italy, and the adjacent parts of the Mediterranean to below 29·8 ins. off the west of Ireland, and to 29·1 ins. and less in a well-defined disturbance over the Baltic and east Prussia. Latter system beginning to disperse during day, but barometer falling decidedly over our own south-western districts and the Bay of Biscay, as well as over central Spain. Highest pressures becoming transferred to Turkey and its neighbourhood.

Tuesday, 21st April, 1903.

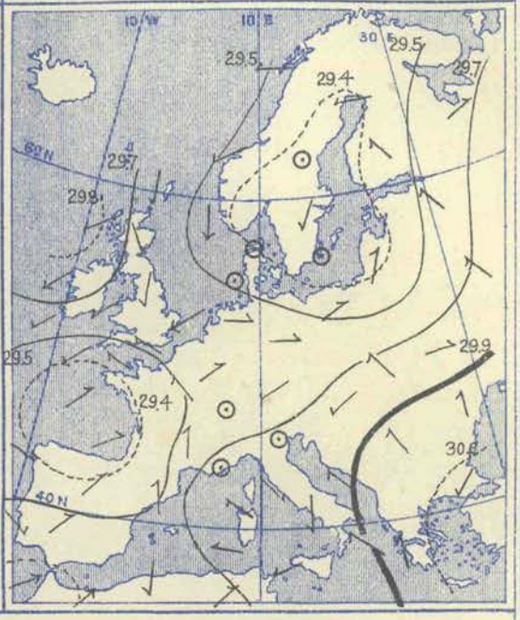
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine on the east and south-east coasts of Great Britain, and also at many southern European stations, but cloudy or dull elsewhere, with rain at Jersey, Rochefort, and Moscow, sleet showers at Scilly, and snow at Sumburgh Head, as well as at Hernösand and Copenhagen. Snow showers later in the north of Great Britain, and rain over the Channel, France, Spain, Italy, and western Germany—as much as 0·9 in. at Frankfürt and Nantes, 0·8 in. at Lisbon and La Coubre.

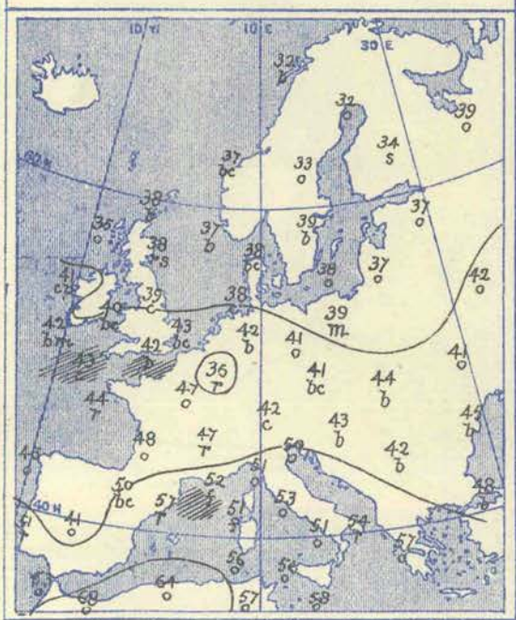
Temperature fallen somewhat at many of our own northern and western stations, but risen in most other places. Morning readings highest, 61° at Oran, 60° at Algiers, 58° at San Fernando, 57° at Malta, and 55° at Lisbon. Lowest, 28° at Haparanda, 32° at Bodö, Ulcaborg, and Hermanstadt, 33° at Christiansund and Hernösand. Lowest in our Islands, 35° at Sumburgh Head. Rising during day to 50° and upwards in several parts of the United Kingdom, and to 55° at Valencia (Ireland), reaching 60° or slightly above it at many of the French and Italian stations, and touching 66° at Bilbao and San Fernando, 70° at Algiers, and 72° at Oran.

Wind still showing a complete cyclonic circulation round the Baltic depression, being Easterly or North-Easterly in Scandinavia, Northerly over the North Sea, Westerly in Germany, and Southerly to South-Easterly over western Russia. Over Ireland, England, and France the wind was governed by a disturbance in the south-west, being light from South-West over the Bay of Biscay, from the Southward over central France, but from the Eastward on our own western and southern coasts. Over southern Europe it was chiefly light from the Northward. No material change later.

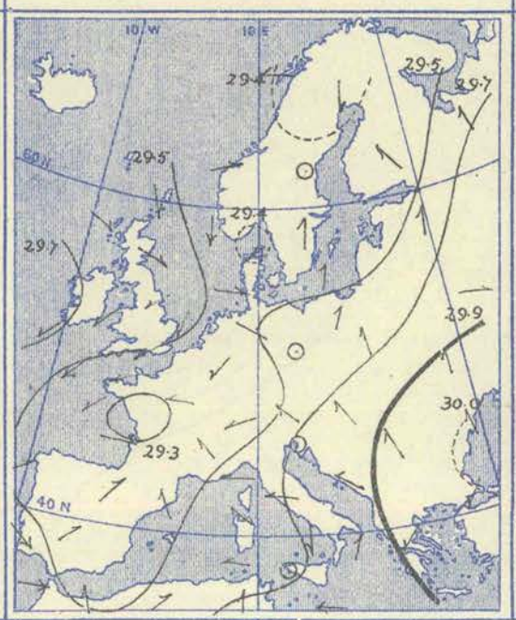
Barometer highest, 30·0 ins. and upwards over southern Russia and Asia Minor, and 29·8 ins. and upwards over the north-west of Scotland. Lowest, 29·2 ins. and less in the centre of a cyclonic system over the Baltic, and 29·4 ins. and less in another system having its centre near the mouth of the English Channel. Former disturbance gradually filling up, and the latter moving in an easterly direction over France.

Wednesday, 22nd April, 1903.

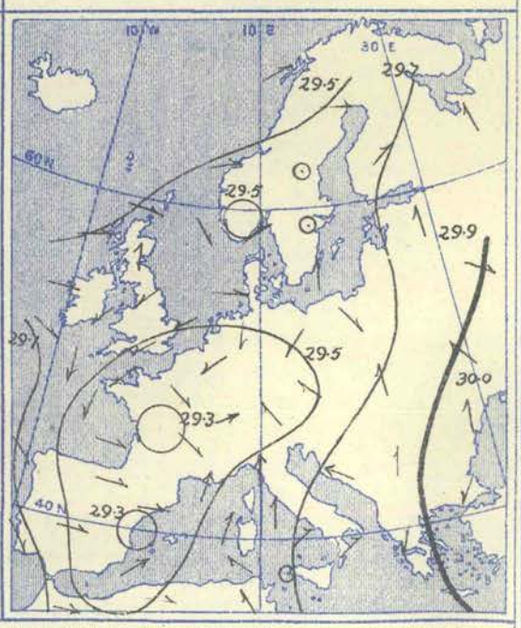
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the United Kingdom and the North Sea, but sleet and hail showers falling at Aberdeen. Fine also over southern Russia, but cloudy or dull elsewhere, with rain in many parts of Spain, France, and Germany. Showers later at many of our own north-western and northern stations, and rain falling generally over France, Germany, and the southern European countries—as much as 2·25 ins. being measured at Lyons and Nice, 0·95 in. at Turin, and 2·21 ins. during a thunderstorm at Bilbao.

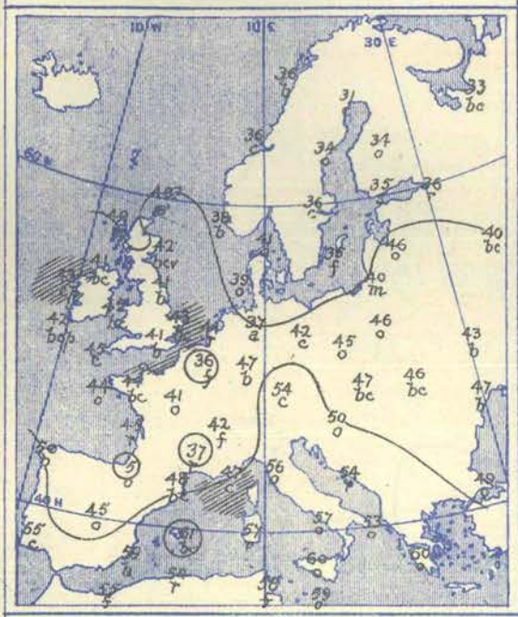
Temperature fallen over England, Ireland, and the north and west of France, risen in most other places. Morning readings highest 68° at Oran, 64° at Algiers, 59° at Sfax, and 58° at Malta, and above 50° at nearly all stations over southern Europe. Lowest, 32° at Haparanda and Bodö, 34° at Kuopio, and 35° at Hangö and Faerder. Lowest in our Islands, 34° at Newton Reigny (Penrith). Rising later to 50° or more over France, to above 60° over Spain and Italy, exceeding 70° over Algeria generally, and reaching 84° at Oran. The maximum temperatures recorded over our Islands nearly all below 50°, and at some eastern stations below 45°. Frost experienced in many parts of Great Britain during the night.

Wind North-Easterly over Ireland, England, and the neighbouring parts of the Continent, blowing strongly in the English Channel, light from between West and South in the south-west of France. Light to moderate breezes from the North-Westward prevailing in Scotland, and also on the eastern shores of the North Sea, and light, variable, or Southerly airs over the Continent generally. No material change later, but Westerly breeze setting in on our own western and north-western coasts, and wind becoming more Northerly over England.

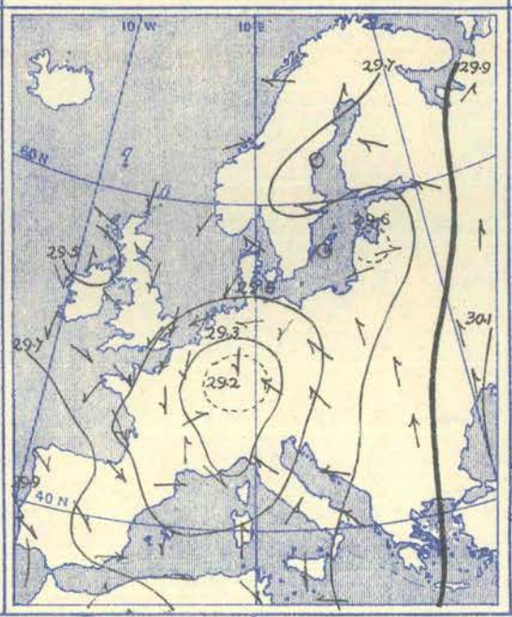
Barometer rising in the west and south of England, falling in nearly all other places. Highest, 30·0 ins. and more over the Black Sea, and 29·7 ins. and more over western and central Ireland. Lowest, 29·3 ins. and less in a cyclonic system situated over the north-western parts of France, and 29·4 ins. and less in two shallow areas over Scandinavia. Depression over France moving slightly eastwards later, and new shallow system appearing off the west of Norway and the extreme north-west coast of Scotland.

Thursday, 23rd April, 1903.

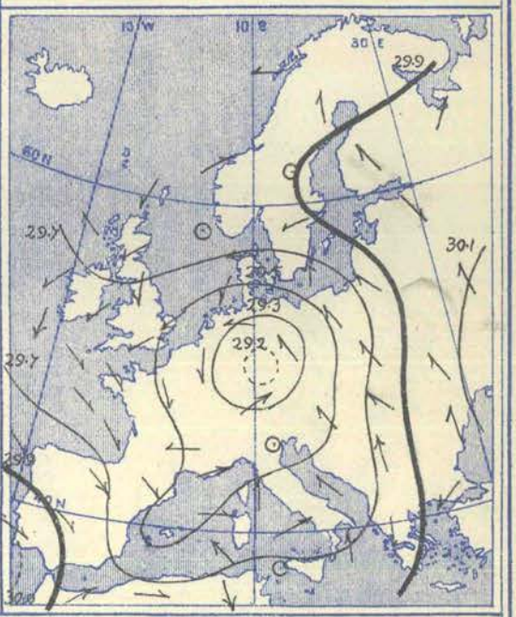
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull over Europe as a whole, but fine and bright in most parts of Great Britain, and at some Irish stations. Rainy at Algiers, in many parts of France, over Denmark and the Netherlands, rain or snow falling over the Gulf of Finland, showers in the west of Ireland, and a thunderstorm prevailing at Bilbao. Slight rain falling later in different parts of the United Kingdom, and heavy amounts over the southern and central regions of the Continent; as much as 0·9 in. at Biarritz, an inch in the south of Italy, 1·1 ins. at Utrecht, and 2·36 ins. at Frankfürt.

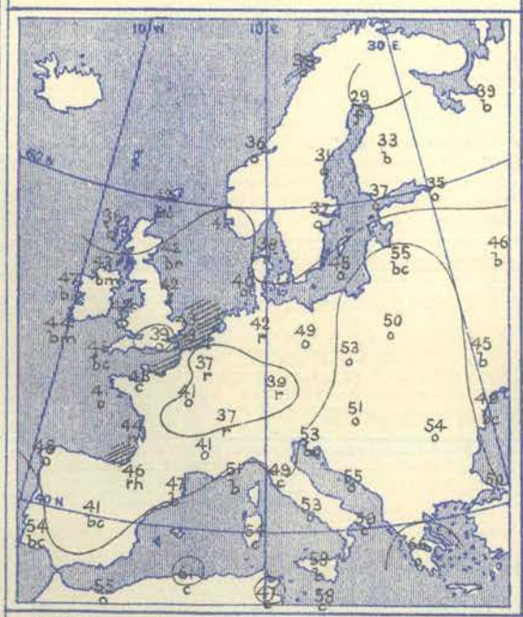
Temperature risen over Italy and the central countries, changed irregularly elsewhere. Readings at 8 a.m. highest, 61° at Palma, 60° at Patras and Palermo, 59° at Malta and Alicante, and 58° at Leghorn. Lowest, 31° at Haparanda, 32° at Karlstadt, 37° at Bath and Lyons, and 41° in London and at Paris. Remaining below 50° at most of our own and at several French stations all day, but rising to 63° at Nice, 64° at Barcelona, 70° at Patras and Tunis, and 73° at La Calle. Maximum at Bilbao only 50°, at Turin 51°, and at Oporto 54°.

Wind in morning showing a complete cyclonic circulation of no great force around the south-west of Germany, the swirl affecting nearly the whole of Europe; Southerly in the north of Ireland, and South-Easterly in Scotland. No general change in direction later, but wind increasing in force in most regions, and shifting to North-East or East on our own northern and north-western coasts.

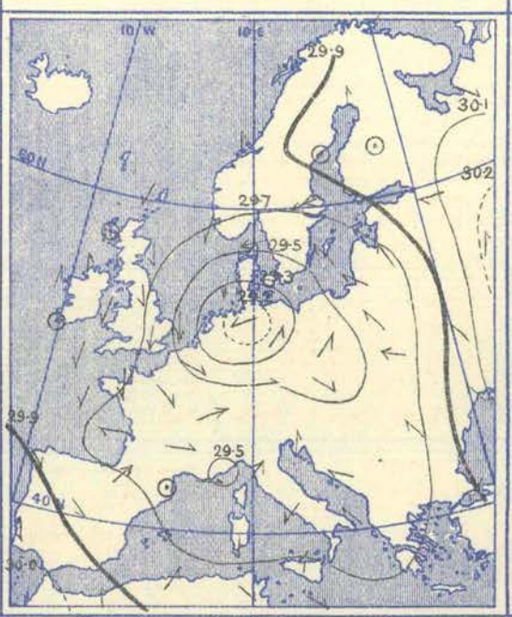
Barometer at 8 a.m ranging from above 30·1 ins. over the south of Russia and the Black Sea, and from 29·9 ins. at Lisbon, to 29·6 ins. in a small depression near Riga, 29·5 ins. and less in a larger but shallow system off the north of Ireland, and to below 29·2 ins. in a well-defined disturbance with its centre near Baden. Two former cyclonic systems dispersing by evening, but latter moving north-eastwards to central Germany, and the surrounding gradients becoming steeper. Local irregularities of pressure appearing over the Gulf of Lion and the Riviera.

Friday, 24th April, 1903.

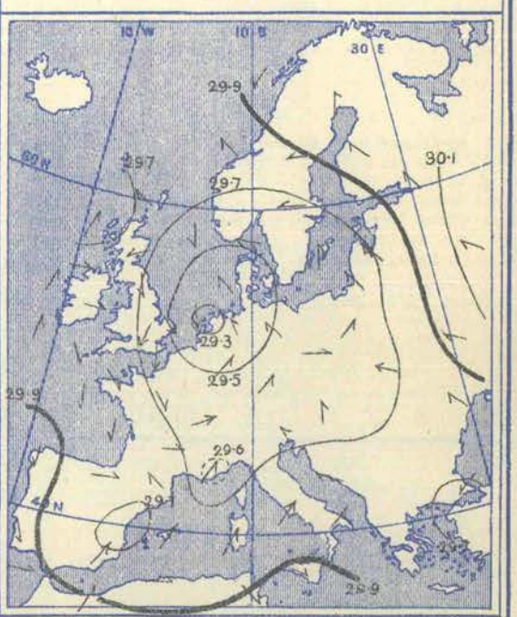
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the greater part of the United Kingdom, and also over the Spanish Peninsula. Dull in most of the Continental countries, with rain in several parts of Denmark, Germany, the Netherlands, and the east of France, as well as at Biarritz and Bilbao; fine over the greater part of Russia. Heavy rain falling later in the Netherlands and many parts of Germany, the largest amounts reported being 1·6 ins. at Frankfürt, 1·5 ins. at Brussels, and 1·2 ins. at the Helder.

Temperature changed slightly and irregularly in our Islands, fallen over France and southern Europe, risen over Germany and the Baltic. Morning readings highest, 66° at Patras, 61° at Athens and Algiers, and 59° at Brindisi; above 50° at most of the Mediterranean, Adriatic, and Spanish coast stations, and also in the eastern parts of Germany and Austria. Lowest, 29° at Haparanda, 31° at Hernösand, and 33° at Kuopio and Karlstad; below 40° at several of our own northern and central stations. Scarcely exceeding 45° all day on our east coasts, but rising to 50° and upwards at many of our western and northern stations, and to 55° at Valencia and Parsonstown.

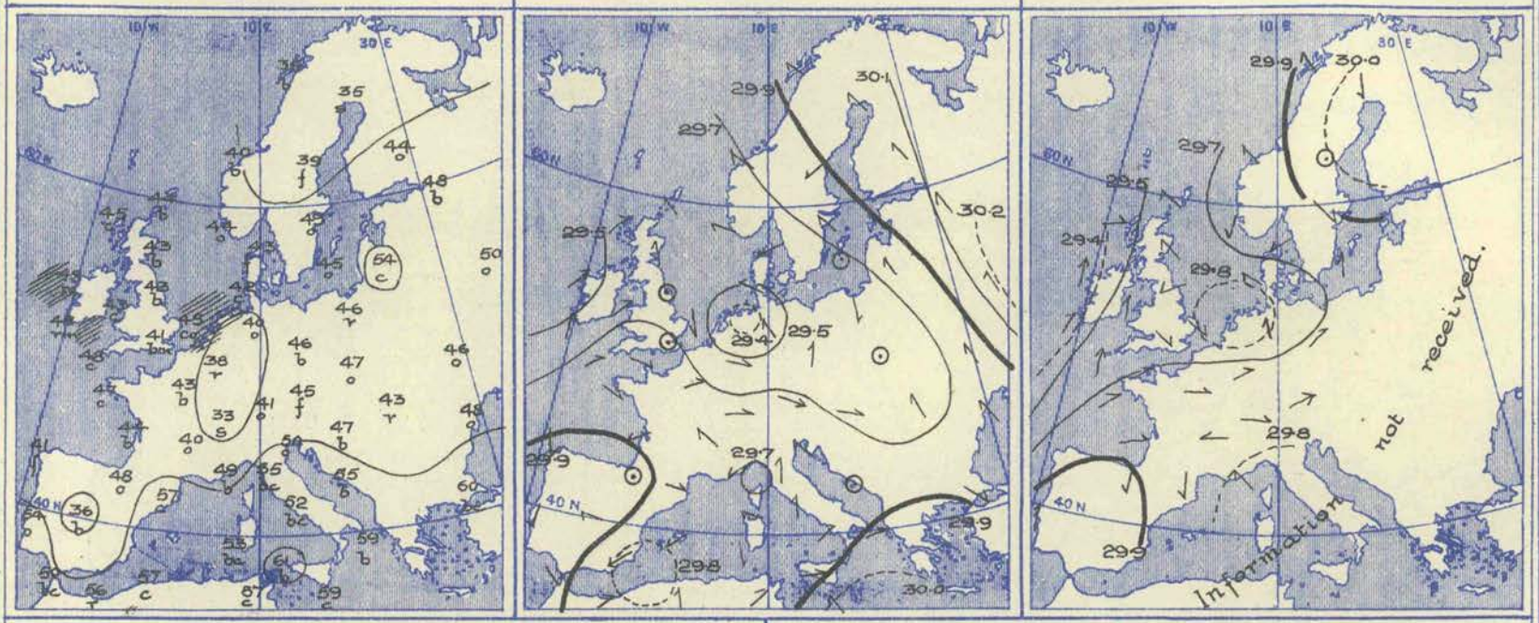
Wind fresh to strong from the Eastward or North-Eastward in Denmark and the south of Sweden; Northerly over the greater part of the United Kingdom, and strong in force on our east coasts, but South-Westerly in the north of Ireland. North-Westerly over the Spanish Peninsula, Westerly in the south of France, and South-Westerly or Southerly in Italy. South-Easterly in Austria and the south of Russia. Subsequently backing to the Southward in the south of Ireland; no important change occurring elsewhere.

Barometer highest 30·2 ins. and upwards over central Russia; 30·0 ins. and upwards in the extreme south of Spain. Lowest, 29·2 ins. and less in a well-marked cyclonic disturbance with its centre near Bremen; gradients for Northerly and North-Easterly winds rather steep over the eastern and southern parts of the North Sea. Disturbance subsequently moving slowly westwards and partially filling up; new low-pressure system approaching our own western coasts in evening.

Saturday, 25th April, 1903.

Temperature and Weather. — 8 a.m.

Barometer and Wind. — 8 a.m. | 6 p.m.



Weather in morning fine over the greater part of western and southern Europe, but rainy in the west of Ireland. Cloudy or dull in most of the northern, eastern, and central countries, with rain over the Netherlands, and in isolated parts of Germany and Austria, and snow at Belfort; rain falling also at some of the Algerian stations. Dull, rainy weather extending later over all the more western and southern parts of the United Kingdom,—amounts large at some of the English Channel stations.

Temperature risen in most countries, but fallen in Germany and Austria. Morning readings highest, 61° at Palermo, and 60° at Constantinople, and 59° at Brindisi and Malta, above 50° over southern Europe generally, and also over the Baltic provinces. Lowest, (1) 33° at Hernösand, 35° at Haparanda, and 37° at Uleaborg; (2) 37° at Newton Reigny (Penrith); below 45° in many parts of Great Britain. Rising during day to 55° or more in several portions of the United Kingdom, to 60° in London, and to 61° at Nairn; exceeding 60° also in the extreme south of France.

Wind Southerly or South-Westerly in the western and northern parts of the United Kingdom, and strong in force in the west of Ireland. North-Westerly over the Netherlands, and the east and south of England; South-Westerly or Southerly in eastern and southern Germany; South-Easterly in Russia; Easterly or North-Easterly in Scandinavia. Variable over Spain and the south of France; Southerly or South-Westerly in Italy. No important change occurring during day.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying over central Russia; 29·9 ins. and upwards over the Spanish Peninsula. Lowest, 29·4 ins. and less in a well marked cyclonic system with its centre over the north-east of Holland; 29·5 ins. and less in another disturbance lying to the westward of our Islands. Depression over Holland filling up later; disturbance off our western coasts spreading slowly eastwards.

IV.—GENERAL NOTES, etc.

The general level of the barometer over Europe during this period was low. There were only two principal cyclonic systems, but these were both large and rather deep. The first, whose centre lay over east Prussia on Sunday, embraced the major portion of the Continent. It subsequently travelled slowly northwards to Scandinavia and the Gulf of Bothnia, where it dispersed about the middle of the week. This system brought exceedingly rough weather throughout the more central parts of the Continent and over the Baltic, strong winds or gales and very heavy falls of snow or rain being experienced generally. The second low-pressure system reached the north-west of France from the Atlantic by the morning of Wednesday, whence it moved eastwards to Baden, northwards to Bremen (by which time its gradients had become steep, owing to a baric rise in the surrounding regions), and subsequently westwards to the north of Holland, in which position it gradually dispersed. This system also caused strong winds in the various countries under its influence, and unusually heavy and persistent rains over France, Germany, and the Netherlands, while one of its southern secondaries occasioned an inch or more in different parts of Italy. These depressions only brought comparatively slight and local falls of snow or graupel to our Islands, but on Saturday a large, irregularly-shaped disturbance was advancing over us from the westward, and by night rain had set in very generally over our western and southern districts. Temperature was again low for the time of year, and nocturnal frosts very common over all except the most southern countries. During the night of the 19th-20th, the sheltered thermometer recorded a reading of 31°, even as far south as Florence.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from Observations made at 8 a.m. in the British Islands, Belgium, Holland and Spain; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands, Belgium and Spain; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 92.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	53·9	+ 17·6	52	+ 17
STRATHPEFFER SPA	42·7	+ 7·7	42	+ 8
EDINBURGH	33·4	+ 2·8	33	+ 3
COCKLE PARK	49·4	—	49	—
NEWCASTLE-ON-TYNE	40·5	—	40	—
YORK	38·7	+ 5·2	38	+ 5
CROMER	43·2	—	43	—
LOWESTOFT	34·6	—	35	—
HOLLESLEY BAY	33·4	—	34	—
DUNMOW	35·8	—	36	—
SHEFFIELD	29·1	—	29	—
WORKSOP	34·7	+ 3·0	35	+ 3
THURCASTON	40·0	+ 6·4	40	+ 6
TUNBRIDGE WELLS	41·3	—	42	—
MARGATE	29·7	- 8·2	30	- 8
BROADSTAIRS	—	—	—	—
RAMSGATE	—	—	—	—
EASTBOURNE	35·6	- 7·0	36	- 7
BRIGHTON	41·2	- 1·3	42	- 1
WORTHING	52·8	—	53	—
BOGNOR	57·9†	—	59†	—
WATERGATE PARK	49·6	—	50	—
WESTBOURNE	51·0†	+ 6·9	52†	+ 7
VENTNOR HOSPITAL	48·5	+ 3·4	49	+ 3
BOURNEMOUTH	66·8	—	67	—
MARLBOROUGH	46·8	+11·8	47	+ 12
SOUTHPORT	52·0	—	52	—
RHYL	55·0	—	55	—
ABERDOVEY	60·8†	—	61†	—
TENBY	47·8	+ 2·5	48	+ 3
TORQUAY	47·8	+ 4·5	48	+ 5
NEWQUAY	45·1	+ 2·4	46	+ 3
GUERNSEY	47·6†	- 0·7	49†	- 1

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 17.] *Third Series.* WEEK ENDING SATURDAY, MAY 2ND, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 98.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	58	33	51·8	40·8	46·1	1 above	34	+ 1	3	−10	219	− 8	458	− 48
	1. SCOTLAND, EAST	61	25	50·0	39·4	44·5	1 below	28	−13	7	− 5	284	− 10	480	− 79
	2. ENGLAND, N.E.	60	33	52·0	40·6	46·1	0 (average)	35	− 5	4	− 4	387	+ 90	340	−125
	3. ENGLAND, EAST	63	34	55·0	43·2	48·8	1 above	48	− 4	0	− 9	471	+ 92	322	−189
	4. MIDLAND COUNTIES	61	30	55·3	42·2	48·5	1 above	46	− 7	0	−10	442	+ 36	351	−167
	5. ENGLAND, SOUTH	60	40	54·6	45·2	49·7	1 above	54	− 3	0	− 5	500	+ 65	208	−173
Principal Grazing Districts.	6. SCOTLAND, WEST	60	30	53·1	40·0	46·3	1 below	39	− 6	6	− 2	332	+ 12	314*	− 85
	7. ENGLAND, N.W.	59	31	54·1	42·1	47·8	0 (average)	41	− 6	0	− 5	398	+ 64	258	−121
	8. ENGLAND, S.W.	60	39	54·7	45·4	49·8	1 above	55	+ 2	0	− 3	518	+ 74	162	−133
	9. IRELAND, NORTH	61	34	53·1	41·9	47·2	0 (average)	37	−10	0	− 6	368	− 24	286*	− 52
	10. IRELAND, SOUTH	62	36	55·3	42·7	48·7	0 (average)	47	− 7	0	− 3	527	+ 25	183	− 62
	— CHANNEL ISLANDS	58	45	54·5	47·4	50·8	0 (average)	62	+ 2	0	− 1	658	+104	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 98.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	3	3 less	92	+17	27·7	+11·7	25	−11	23	−10	259	− 69	20	− 5
	1. SCOTLAND, EAST	6	8	3 more	77	+14	14·1	+ 5·1	6	−31	5	−29	303	− 62	24	− 5
	2. ENGLAND, N.E.	6	10	5 more	63	+ 4	7·0	+ 0·1	18	−14	17	−13	348	− 28	27	− 2
	3. ENGLAND, EAST	5	8	5 more	56	− 4	6·0	− 0·5	27	−16	27	−16	420	− 3	32	0
	4. MIDLAND COUNTIES	7	17	13 more	61	+ 4	9·5	+ 1·7	19	−19	18	−18	351	− 11	27	− 1
	5. ENGLAND, SOUTH	7	23	19 more	66	+10	9·7	+ 1·5	28	−13	27	−13	409	− 11	31	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	5	6	0 (average)	88	+22	24·3	+ 8·8	21	−16	21	−16	309	− 61	24	− 5
	7. ENGLAND, N.W.	6	12	8 more	76	+15	13·6	+ 4·2	21	−16	21	−16	360	− 3	28	0
	8. ENGLAND, S.W.	7	22	17 more	75	+11	15·4	+ 3·4	25	−20	24	−20	382	− 67	29	− 5
	9. IRELAND, NORTH	5	7	1 more	91*	+17	16·0	+ 5·7	23	−15	22	−14	301	− 67	23	− 5
	10. IRELAND, SOUTH	6	14	8 more	85	+17	17·7	+ 4·9	29	−12	28	−12	338	− 81	2	− 6
	— CHANNEL ISLANDS	6	14	9 more	79	+11	10·8	+ 0·8	31	−19	31	−18	477	− 27	36	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was much milder than of late, but very wet and unsettled, especially over the southern half of the Kingdom. Thunder and lightning were experienced in many parts of the country—mostly during the latter days of the period. A good deal of fog prevailed on the north-east coast of England and the east coast of Scotland.

Temperature differed but little from the mean. The highest of the maxima occurred on somewhat irregular dates, and ranged from 63° in England E., 62° in Ireland S., and 61° or 60° over the Kingdom as a whole, to 58° in the Channel Islands and Scotland N. The maxima on the north-east coast of Great Britain and on the north coast of Ireland were often below 50°. The lowest of the minima were registered, as a rule, during the early days of the period, and ranged from 25° in Scotland E., and 30° in the Midland Counties, and Scotland W., to 39° in England S.W., 40° in England S., and to 45° in the Channel Islands.

Rainfall exceeded the mean generally, but only just equalled it in Scotland W., and was rather less in Scotland N. In most localities the fall was two or three times as great as the mean amount, and in the Midland Counties and England S.W. more than four times, while in England S. it was nearly six times as great. The heaviest aggregate falls were 2·93 ins. at Bath, 3·04 ins. at Southampton, and 3·24 ins. at Shaftesbury.

Bright Sunshine was very deficient. The percentage of the possible duration ranged from 31 in the Channel Islands, and 28 in Ireland S. to 18 in the Midland Counties, 17 in England N.E., and to only 5 in Scotland E.

Barometer and Wind. During the whole of this period the barometer was relatively high both over the Scandinavian and Spanish Peninsulas, while depressions—mostly shallow, and often ill-defined—spread or moved over our Islands from the westward or south-westward. The wind was consequently moderate or light generally, and usually blew from between S. and S.W. over our more southern districts, and from the South-Eastward or Eastward in the north. Quite at the end of the week, however, when a rather deep disturbance had arrived off our south-west coasts, the wind increased considerably in strength on all our south-western coasts, and attained the force of a fresh gale both at Scilly and Roche's Point.

207 | 90 Wy. & S. Ltd.
319 | 70 1901 02

II.—DATA from which the SUMMARY on page 97 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	50	41	47·9	42·3	45·0	+ 1·9	21	0	4	0·25	− 0·19	*	*	*	*
	Stornoway	57	38	54·0	42·1	47·8	+ 3·0	41	0	2	0·11	− 0·46	53·0	+ 13·5	49	+ 13
	Wick	49	39	47·0	41·1	43·9	− 0·9	17	3	7	0·57	+ 0·17	*	*	*	*
	Lairg $	57	33	50·7	39·4	44·8	+ 0·8	31	7	6	0·92	+ 0·39	*	*	*	*
	Glencarron $	56	34	53·2	39·1	45·8	+ 0·8	39	8	2	0·25	− 0·79	*	*	*	*
	Fort Augustus $	58	33	53·9	39·8	46·5	0·0	41	6	2	0·10	− 0·36	18·5	− 10·2	18	− 10
	Fort William	58	34	56·0	41·8	48·6	+ 1·5	47	1	4	0·18	− 0·62	25·0	− 10·4	24	− 10
1. SCOTLAND, E.	Nairn	57	33	54·6	38·7	46·3	+ 0·1	44	9	4	0·25	− 0·09	*	*	*	*
	Aberdeen	52	40	46·9	40·7	43·7	− 2·1	17	4	7	0·78	+ 0·32	5·1	− 34·1	5	− 32
	Braemar $	54	25	47·6	36·9	42·0	− 0·9	16	14	6	1·13	+ 0·62	*	*	*	*
	Ochtertyre $	61	38	52·7	41·4	46·8	+ 0·1	36	2	6	0·90	+ 0·37	*	*	*	*
	Leith	53	35	49·4	40·3	44·6	− 2·5	25	5	7	0·66	+ 0·31	*	*	*	*
	Marchmont $	55	34	48·9	38·6	43·5	− 1·5	25	10	7	0·88	+ 0·35	6·8	− 30·0	6	− 29
2. ENGLAND, N.E.	Alnwick Castle	56	35	51·6	38·4	44·7	− 0·3	34	10	6	1·28	+ 0·81	*	*	*	*
	Durham	53	33	49·3	36·2	42·4	− 3·5	27	16	4	0·22	− 0·22	20·8	− 12·5	20	− 12
	Shields	55	40	50·6	41·1	45·6	0·0	29	3	5	0·88	+ 0·52	*	*	*	*
	Scarborough ℳ	59	35	52·1	41·5	46·6	+ 0·2	34	1	7	1·44	+ 1·02	17·5	—	17	—
	Spurn Head	57	41	52·4	43·9	48·0	+ 1·4	42	0	7	0·74	+ 0·40	*	*	*	*
	Fulbeck (Lincolnshire)	60	35	56·1	42·5	49·0	+ 1·6	49	0	6	1·12	+ 0·72	20·8	—	20	—
3. ENGLAND, E.	Hillington ℳ	61	36	57·3	42·6	49·6	+ 1·7	53	0	5	0·78	+ 0·38	18·2	− 22·7	18	− 22
	Yarmouth	55	39	52·1	42·4	47·0	+ 0·2	35	0	3	0·51	+ 0·13	*	*	*	*
	Geldeston	61	34	56·7	41·8	48·9	+ 1·2	49	1	5	0·58	+ 0·22	33·5	− 9·9	33	− 10
	Cambridge	63	38	57·7	43·0	50·0	+ 1·0	56	0	6	0·64	+ 0·28	26·3	− 14·7	26	− 14
	Felixstowe	55	41	51·6	44·4	47·8	+ 0·2	41	0	4	1·06	—	35·7†	—	35†	—
	Rothamsted	58	40	54·8	43·1	48·7	+ 1·0	47	0	7	1·29	+ 0·85	22·7	− 16·7	22	− 16
	Shoeburyness	58	42	54·9	45·1	49·8	+ 1·4	55	0	5	0·93	+ 0·63	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	57	35	53·5	39·6	46·2	+ 0·1	39	7	7	1·52	+ 1·05	16·5	—	16	—
	Bawtry (Hesley Hall)	61	30	56·7	39·9	47·9	− 0·2	50	6	7	1·30	+ 0·90	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	60	40	56·1	43·1	49·3	+ 0·9	51	0	7	1·63	+ 1·23	*	*	*	*
	Cheadle ℳ	59	39	54·5	41·8	47·9	+ 1·2	42	1	7	1·98	+ 1·50	*	*	*	*
	Birmingham (Edgbaston)	59	40	54·8	43·1	48·7	+ 1·3	47	0	7	1·83	+ 1·36	16·4	—	16	—
	Churchstoke ℳ	61	39	56·5	42·3	49·1	+ 2·6	50	0	7	1·11	+ 0·67	20·8	− 18·0	20	− 18
	Hereford ℳ	60	41	55·7	43·7	49·4	+ 0·7	52	0	6	2·05	+ 1·62	*	*	*	*
	Cirencester	59	37	54·9	41·8	48·0	+ 0·6	43	1	7	1·87	+ 1·42	18·9	− 21·9	19	− 22
	Oxford	59	41	55·3	44·4	49·6	+ 0·6	53	0	7	2·36	+ 1·98	19·0	− 20·3	19	− 20
5. ENGLAND, S.	London	60	40	56·9	44·3	50·3	+ 0·1	58	0	7	1·44	+ 1·06	21·6‡	− 18·2‡	21‡	− 13‡
	Swarraton (Alresford) ℳ	58	41	55·4	45·0	50·0	+ 2·5	56	0	7	2·43	+ 2·00	*	*	*	*
	Dungeness	56	41	53·4	45·6	49·3	+ 0·7	51	0	5	1·65	+ 1·33	38·3	—	38	—
	Hastings (St. Leonards)	56	41	52·1	45·6	48·7	− 0·3	47	0	7	1·33	+ 0·93	32·2	− 14·1	32	− 14
	Southampton	59	43	57·2	46·6	51·7	+ 1·5	68	0	7	3·04	+ 2·60	29·2	− 14·5	29	− 14
	Portland Bill	55	44	53·0	46·0	49·3	− 0·4	51	0	7	2·89	—	*	*	*	*
	Shaftesbury ℳ	56	40	54·0	43·1	48·3	+ 0·3	44	0	7	3·24	+ 2·71	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	60	39	56·0	43·0	49·2	+ 1·8	50	0	5	0·12	− 0·73	*	*	*	*
	Glasgow	55	38	51·3	41·5	46·2	− 0·6	32	1	4	0·58	+ 0·08	9·0	− 24·4	9	− 23
	Cally $	54	30	51·3	37·1	43·9	− 3·5	34	14	6	0·92	+ 0·31	*	*	*	*
	Aspatria	57	32	53·8	38·0	45·5	− 0·9	41	11	5	0·46	—	17·4	—	17	—
	Douglas (Isle of Man)	55	34	52·9	40·6	46·5	− 0·7	37	4	6	0·81	+ 0·28	37·9	− 8·2	36	− 8
7. ENGLAND, N.W	Newton Rigg	56	31	52·9	36·0	44·0	− 1·4	39	17	6	0·70	—	13·6	—	13	—
	Stonyhurst	55	35	52·1	41·7	46·7	− 0·5	34	1	6	1·14	+ 0·57	18·8	− 19·7	18	− 19
	Blackpool ℳ	59	34	55·8	41·2	48·2	+ 0·3	47	2	5	1·18	+ 0·74	28·3	− 11·1	27	− 11
	Manchester (Prestwich)	58	38	54·9	43·1	48·7	+ 1·4	47	0	6	1·69	+ 1·22	16·2	—	16	—
	Liverpool Obsy. (Bidston)	57	40	55·0	43·9	49·2	+ 0·6	50	0	5	1·51	+ 1·13	23·7	—	23	—
	Chester (Hawarden Bridge)	58	39	55·7	43·9	49·5	+ 0·4	53	0	5	1·47	—	*	*	*	*
	Llandudno ℳ	58	40	53·1	43·6	48·1	− 0·7	43	0	5	0·88	+ 0·47	22·1	− 17·9	22	− 17
	Holyhead	58	41	53·4	43·7	48·3	− 0·2	44	0	6	1·25	+ 0·82	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	54	44	52·0	45·7	48·7	+ 0·7	47	0	7	2·44	+ 2·00	26·7	− 19·1	26	− 19
	Clifton	59	43	55·3	45·2	50·0	+ 1·2	56	0	7	2·16	+ 1·64	*	*	*	*
	Bath	60	42	56·3	44·9	50·3	+ 1·0	58	0	7	2·93	+ 2·47	28·1	—	28	—
	Arlington (N. Devon)	57	42	53·7	43·0	48·1	+ 0·8	43	0	7	1·61	+ 0·96	*	*	*	*
	Cullompton ℳ	60	39	56·0	44·3	49·9	+ 2·2	55	0	7	2·23	+ 1·70	19·5	− 20·7	19	− 20
	Falmouth	57	47	55·3	47·2	51·1	+ 1·6	64	0	7	2·13	+ 1·51	28·0	− 18·7	28	− 19
	Plymouth	57	46	54·5	47·2	50·7	+ 0·4	61	0	7	1·89	+ 1·39	22·1	− 22·1	22	− 22
9. IRELAND, N.	Malin Head	53	41	50·1	43·3	46·5	− 0·9	32	0	5	0·64	+ 0·19	*	*	*	*
	Edenfel (Omagh)	61	36	56·0	40·7	48·0	+ 1·2	47	4	6	0·92	+ 0·38	*	*	*	*
	Blacksod Point	57	41	53·3	44·1	48·5	− 0·3	46	0	5	0·40	− 0·24	*	*	*	*
	Markree Castle	60	34	54·6	38·3	46·1	− 1·3	44	10	5	0·60	+ 0·05	21·6	− 16·1	21	− 16
	Armagh	57	39	53·5	42·2	47·6	+ 0·2	39	0	5	0·69	+ 0·21	23·4	− 13·2	23	− 13
	Donaghadee	53	40	51·0	42·6	46·6	− 0·9	32	0	5	0·63	+ 0·17	*	*	*	*
10. IRELAND, S.	Dublin	59	39	55·1	44·1	49·3	0·0	51	0	7	1·10	+ 0·65	24·3	− 18·2	24	− 18
	Birr Castle	59	36	55·4	40·3	47·5	− 0·9	46	5	6	0·81	+ 0·31	22·7	− 15·7	22	− 15
	Kilkenny	58	38	55·0	42·4	48·4	− 0·5	45	0	5	1·51	+ 1·01	*	*	*	*
	Waterford	57	37	54·3	42·6	48·2	− 0·1	43	0	5	2·16	+ 1·59	*	*	*	*
	Roche's Point	59	40	54·3	45·0	49·4	− 0·5	52	0	7	1·73	+ 1·03	*	*	*	*
	Valencia	57	38	54·7	43·1	48·6	− 1·5	46	0	4	1·42	+ 0·62	40·8	− 1·7	40	− 2
	Killarney	62	36	57·2	42·1	49·3	+ 0·1	51	0	7	0·81	+ 0·06	*	*	*	*
	Foynes	59	36	56·0	42·1	48·7	0·0	47	0	5	1·51	+ 0·95	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	45	53·9	47·4	50·5	+ 0·4	60	0	5	1·35	+ 0·90	29·6	− 17·8	29	− 18
	Jersey	58	45	55·1	47·3	51·0	0·0	63	0	7	1·39	+ 0·95	28·7	− 21·3	28	− 21

Stations Marked ℳ are in connection with the Royal Meteorological Society, and those marked $ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

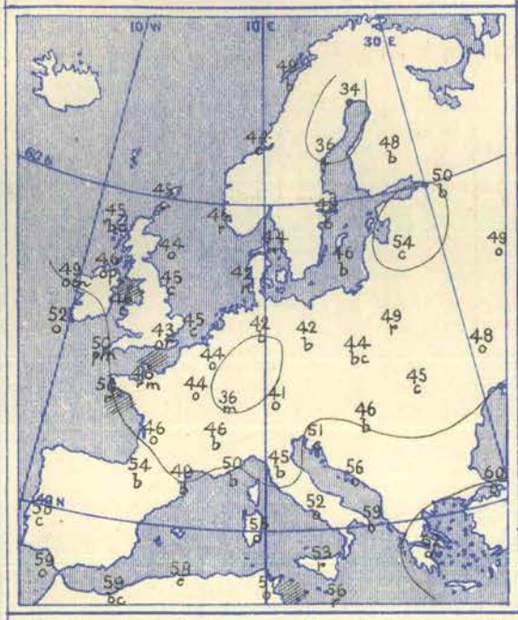
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

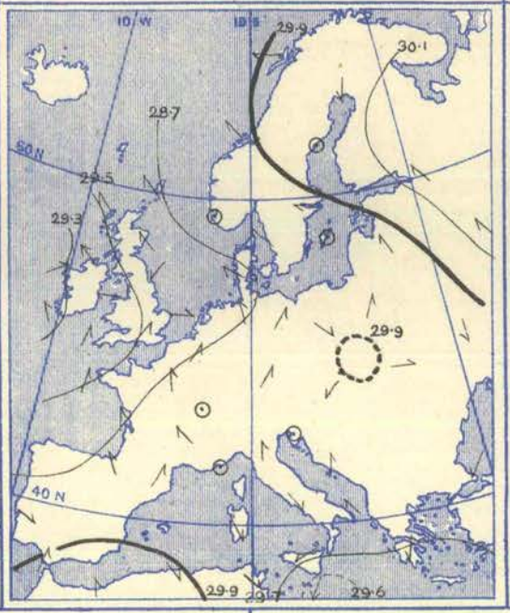
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 26th April, 1903.

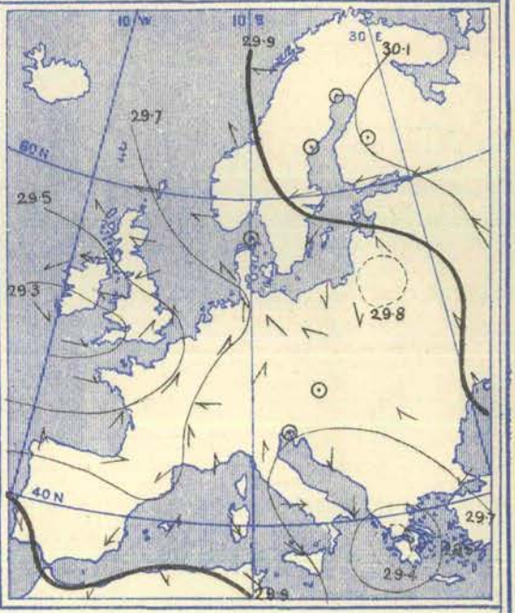
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast in nearly all places, but fine over the north of Italy and the Riviera. Rainy over our own southern and south-western districts, the north of France, the Netherlands, at Fanö, and in the south of Norway, as well as at Malta and Palermo. Rain very general over the greater part of our Islands, and the adjacent countries of the Continent during day, and a considerable fall experienced at Alicante. Largest amounts, an inch or more, on the shores of the Straits of Dover, and 0·6 in. at Portland Bill.

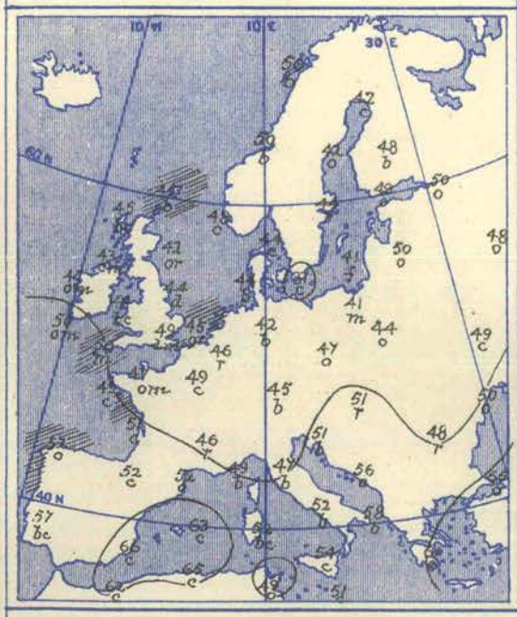
Temperature low generally. Morning readings highest, 62° at Athens, 60° at Constantinople, 59° at Nemours, San Fernando, and Brindisi. Lowest, (1) 34° at Haparanda, (2) 36° at Belfort, 39° at Frankfürt, (3) 43° in the north of Scotland, (4) 45° and 46° respectively at Florence and Rome. Rising later to 66° at St. Petersburg, 68° in the south-west of France, to 70° or a little higher at some Algerian stations, and to 82° at Patras. Remaining below 50° in many parts of our Islands, but touching 56° at Stornoway and 57° at Nairn.

Wind in morning moderate from West over Portugal, Southerly over France and our southern coasts, and South-Easterly over our northern districts. Light from the Eastward over Scandinavia and Denmark, and variable over central Europe and Italy. A moderate gale from North-North-East prevailing at Malta, and a strong East-North-East breeze at Athens. Not much change as a whole later, but a fresh or strong North-Westerly wind setting in over Italy, and wind veering to South-South-East and continuing to blow strongly at Athens.

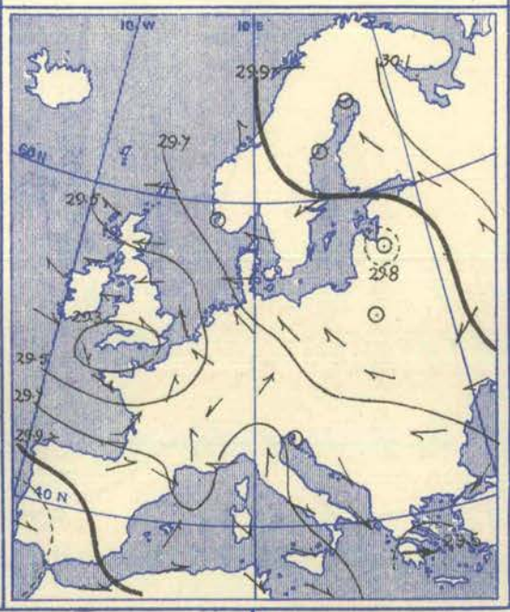
Barometer at 8 a.m. ranging from 30·1 ins. over Finland and the north-east of Russia, and above 29·9 ins. over Morocco and Algeria, to 29·5 ins. and less in a depression near Malta, and to 29·3 ins. and less in another system off the west of Ireland. Latter system moving east-south-eastwards later, and that near Malta apparently travelling to Greece and becoming deeper. Gradients increasing over Italy and its neighbourhood. A shallow depression forming over Poland.

Monday, 27th April, 1903.

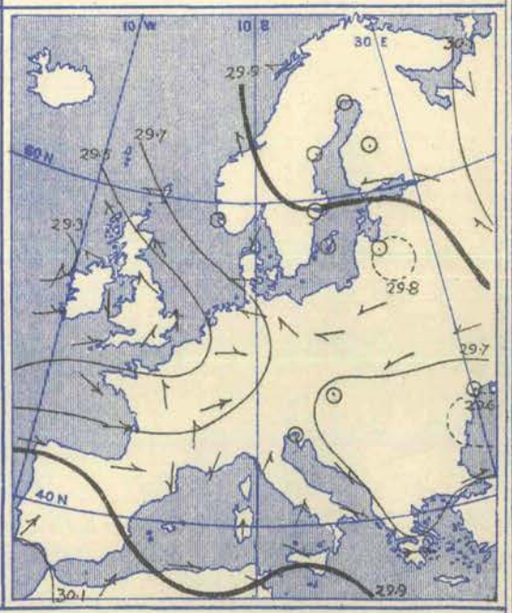
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull and rainy in most parts of Great Britain, the north-east of France, and in Belgium. Cloudy or dull over Europe generally, with rain at Karlstad, Stockholm, Lyons, Buda-Pesth, and Hermanstadt. Fine and bright in the Riviera and at many Italian stations. Rain falling later throughout the United Kingdom, and in nearly all parts of Europe—heaviest amounts 0·5 in. at Nice, and 1·1 ins. at Oporto.

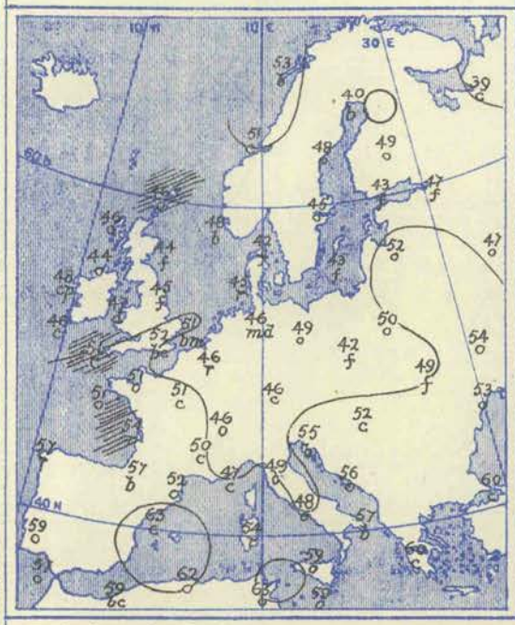
Temperature risen in most parts of Scandinavia, changed irregularly elsewhere. Morning readings ranging from 66° at Alicante, 65° at Algiers and Constantinople, 58° at Brindisi and Malta, to 47° at Florence, 42° at Frankfürt, Cuxhaven, Hernösand, Haparanda, and Aberdeen, and to 37° at Copenhagen. As high as 50° at Bodö and Christiansund. Rising subsequently to nearly 60° at Christiansund and Haparanda, to 64° at Marseilles, 68° at Buda-Pesth and Palermo, to above 70° in Algeria, and to 75° at Athens.

Wind in morning showing two complete cyclonic circulations—one around the south of England, and the other around Courland and the Gulf of Riga. Light or moderate in force generally, but South-South-Easterly current strong at Yarmouth. Fresh or strong North-North-Westerly winds prevailing over the Adriatic, and strong Westerly winds in Greece. Not much change as a whole later, but Westerly wind at Athens increasing to a gale, and an irregular cyclonic circulation setting in over the western part of the Mediterranean.

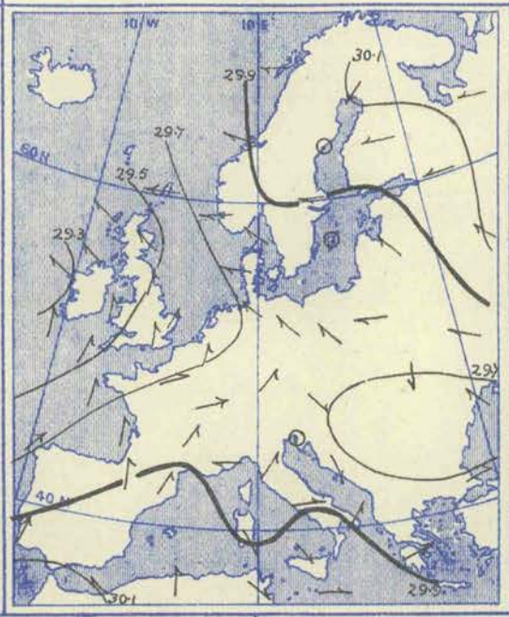
Barometer at 8 a.m. ranging from above 30·0 ins. over Russia and the north of Scandinavia, to below 29·8 ins. in a depression over Courland and its neighbourhood, to below 29·5 ins. in another system over Greece and Asia Minor, and to less than 29·3 ins. in a third disturbance over the south of England. Grecian depression moving north-eastwards to the Black Sea later, that over England northwards, and that over Russia partially dispersing. A fresh baric fall commencing in Ireland, and a shallow cyclonic system appearing between the Balearic Isles and Sardinia.

Tuesday, 28th April, 1903.

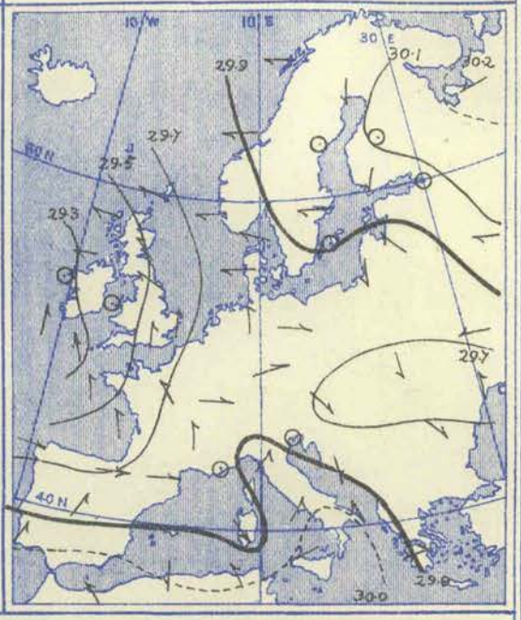
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or overcast as a whole, both throughout our Islands and Continental Europe. Showers falling at several of our own western and northern stations, and steady rain in the west of the Spanish Peninsula, at Rochefort, Brussels, Frankfurt, and Fanö. Fog prevailing on our north-east coasts, in several parts of Denmark, the Gulf of Finland, and central Europe. Rain general later over the western countries and also in many German and Hungarian localities. Amounts considerable over our Islands and the west and north of France.

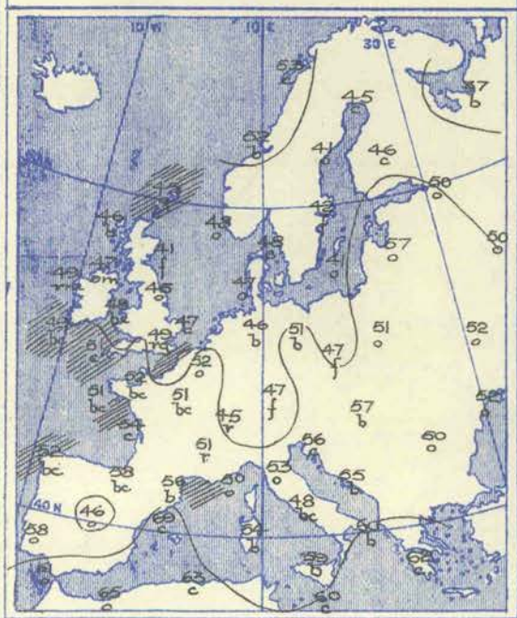
Temperature risen in most regions. Morning readings highest, 63° at Tunis and Barcelona, 60° at Constantinople and Patras, 59° at Corunna and Lisbon, 55° in the north-west of Finland, and 53° at Bodö. Lowest, 39° at Archangel, 40° at Haparanda, Neu-Fahrwasser, and Copenhagen, 43° at Helsingfors and Wick, and 47° at Turin and Nice. Rising during day to 59° at Haparanda, 60° in London, 64° at St. Petersburg, to a little less than 70° in most parts of southern Europe, to 74° at Perpignan, and to 77° at Algiers.

Wind in morning Southerly or South-Westerly over the Iberian Peninsula, France, and our more southern districts, and drawing into South-East over Denmark, and all our northern districts. Variable or Westerly over the Mediterranean, and Easterly over northern Europe. A feeble cyclonic circulation prevailing over the south-eastern countries. Light or moderate in force generally, but West-South-Westerly wind strong at Athens. No important change as a whole later, but wind veering somewhat over Spain and Portugal, and increasing in force.

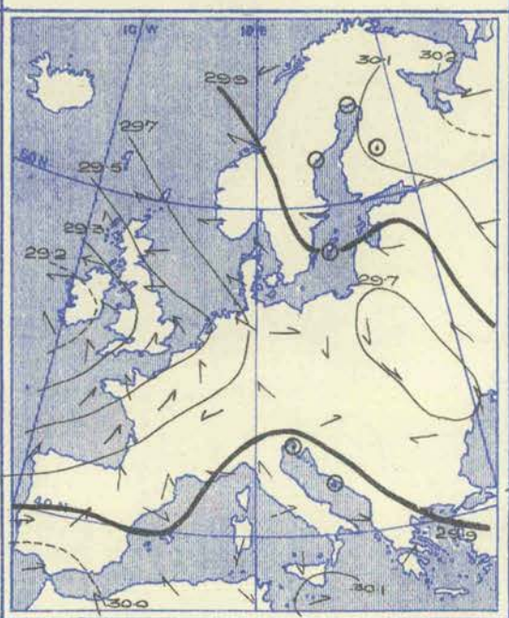
Barometer at 8 a.m. ranging from above 30·1 ins. over the north-east of Russia and in Lapland, and also over and a little to the northward of Morocco, to below 29·6 ins. in a depression with its centre near Odessa, and to less than 29·3 ins. in another system off the west of Ireland. Another cyclonic disturbance approaching the south-west of England later, and an ill-defined system appearing over Sardinia. Russian disturbance moving northwards.

Wednesday, 29th April, 1903.

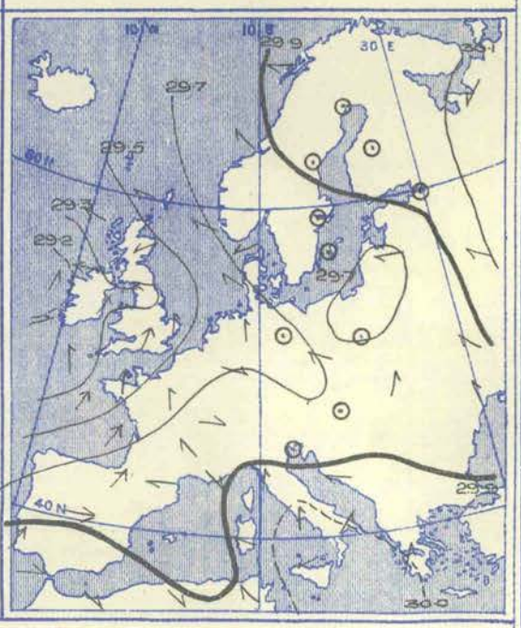
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in Italy and the north-west of Norway; cloudy or dull in almost all other regions, with rain at Lyons, Limoges, in different parts of Hungary, and at some stations in England and Ireland; fog prevailing in the east of Scotland, the northern parts of the Baltic, and in various German localities. Rain falling later throughout our Islands and the Netherlands, in nearly all parts of France, at Lisbon, and at a few German, Russian, and Scandinavian stations—largest amount, 0·63 in. at Belfort.

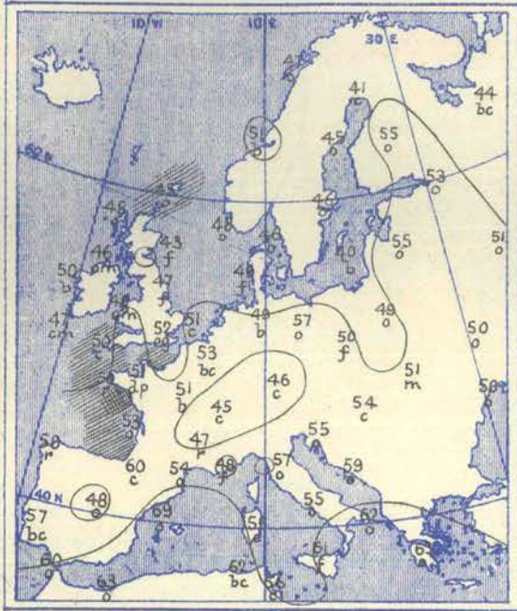
Temperature risen as a whole. Ranging at 8 a.m. from 69° at Barcelona, 65° at Nemours, 62° at Patras, and 60° at Brindisi, to about 50° over the southern half of our area as a whole and the major portion of Russia and Norway, to 46° at Madrid, 41° at Aberdeen, and to 37° at Archangel. Rising during day to 60° in London, 61° at Christiansund, 66° at Memel and Prague, to 70° at St. Petersburg, Vienna, and one or two degrees higher at some stations in southern Europe. Highest reading of all 84° at Tunis. Not exceeding 45° on the north-east coast of Scotland, and only touching 55° at Lyons and Nice.

Wind in morning fresh or strong from West over Spain and Portugal, moderate or light from South-West and South over France and our southern coasts, moderate or fresh from South-East or East over Denmark and all our own more northern districts. Light and mainly Easterly over northern Europe, and light and variable over the Mediterranean. A feeble cyclonic movement over the eastern part of central Europe. No material change later.

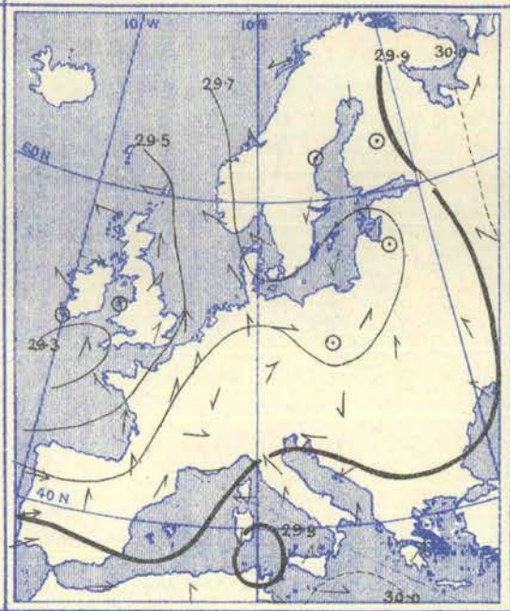
Barometer at 8 a.m. ranging from 30·2 ins. to 30·1 ins. over the north of Russia, and from above 30·0 ins. over Italy, the south of Spain and Morocco, to 29·7 ins. and less in an elongated depression stretching from Warsaw to Odessa, and to below 29·2 ins. in another system over and to the westward of Ireland. Both disturbances moving northwards during day, and a fresh fall of the barometer taking place in the south-west of England. Russian high-pressure decreasing slowly.

Thursday, 30th April, 1903.

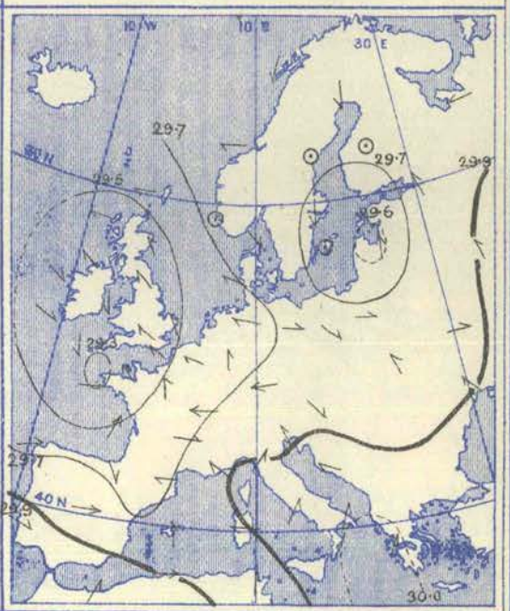
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Netherlands and the north-east of France, but cloudy or dull in almost all other regions. Rainy at Corunna, Lyons, Prague, over Brittany, and at several of our own stations; fog prevailing on our north-east coasts, as well as at Breslau and Cape Sicié. Rain falling later in nearly all parts of Europe, but continuing fine in Italy, Greece, the south of Russia, and the north of Scandinavia. Largest amount, 0·47 in. at Memel and Cape Gris Nez. Thunderstorms occurring at Roche's Point, Harrogate, and Dungeness.

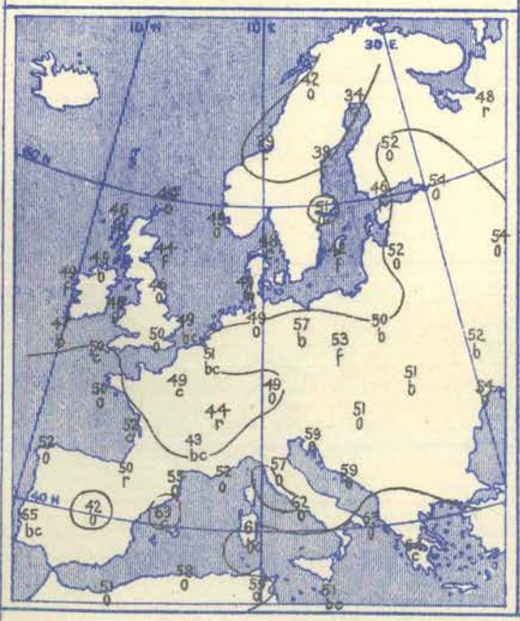
Temperature risen slightly as a whole. Morning readings ranging from 69° at Barcelona, 63° at Nemours and Patras, and 62° at Brindisi, to 50° or above over the major portion of the Continent (including Finland), to 48° at Madrid, Cape Sicié, and Cracow, 45° at Belfort, 44° at Wick and Archangel, 43° at Aberdeen, to 41° at Haparanda, and to 40° at Wisby. Exceeding 70° during day at most Algerian, Spanish, Italian, and Grecian stations, and also at Perpignan, and rising to 68° at St. Petersburg, and 61° at Hernösand. Remaining below 60° over the United Kingdom, and only touching 49° at Wick.

Wind fresh from the Westward over the Iberian Peninsula, and mainly Southerly (moderate or fresh) over France, the Netherlands, and Great Britain, but drawing into East in the north of Scotland. Rather variable elsewhere, but a faint cyclonic movement prevailing over the central parts of the Mediterranean. Definite cyclonic circulations springing up later over our south-western districts and the north of France, and also around the Gulf of Riga.

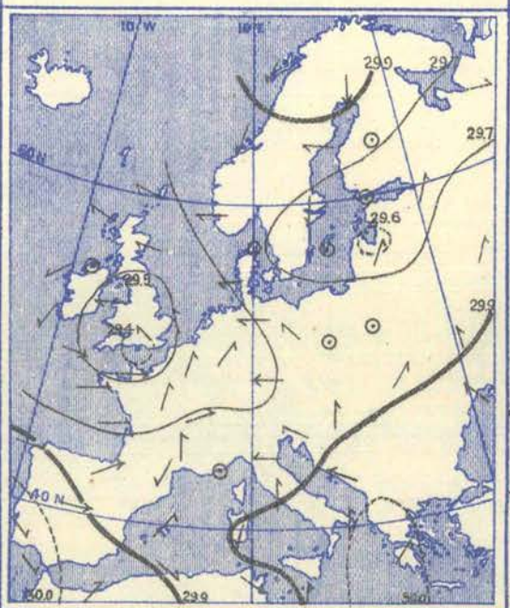
Barometer fallen generally, but risen over Ireland, England, the Netherlands, and Germany. Readings at 8 a.m. ranging from above 30·1 ins. over and to the eastward of Malta, and from above 30·0 ins. over Morocco and the greater portion of Russia, to below 29·9 ins. in a depression lying between Sardinia and Tunis, to less than 29·7 ins. over the east of Germany and the adjacent parts of Russia, to below 29·4 ins. in a shallow area embracing most of the United Kingdom, and to below 29·3 ins. in a minimum over the Bristol Channel. Two well-defined disturbances appearing later—one over the Gulf of Riga (29·6 ins.) and the other over the mouth of the English Channel (29·3 ins.).

Friday, 1st May, 1903.

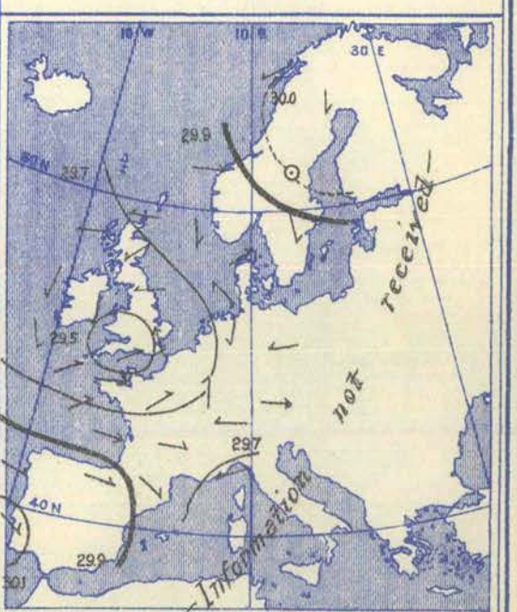
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast very generally, with fog over the Baltic, and on the east coast of Scotland, and rain at a few of our own stations, the Helder, Münster, Biarritz, San Fernando, Oran, and Archangel. Rain falling later at most stations over the western half of Europe—largest amounts, 0·4 in. at Pembroke and Portland Bill, and 1·1 ins. at Nice. Continuing foggy on the east coast of Scotland.

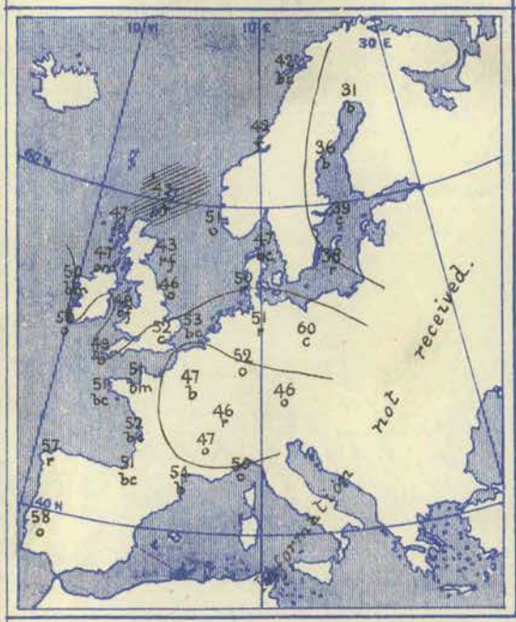
Temperature changed irregularly. Ranging in morning from 71° at Aumale, 67° at Malta, 64° at Patras, and 63° at Leghorn and Barcelona, to about 50° or a little less over Europe as a whole, to 44° on our own north-east coasts, 42° at Bodö and Madrid, and to 34° at Haparanda. As high as 54° at St. Petersburg and Moscow. Rising subsequently to 65° at Perpignan, 68° at Munich, and to 70° at Berlin. Not exceeding 55° at Nice and 53° at Lyons, and falling to touch 50° on our own north-east coasts, and at Pembroke.

Wind in morning showing a complete cyclonic movement around the south of England, the Westerly current over the Bay of Biscay and the west of France being strong in force. Another, but less well-marked, cyclonic circulation prevailing around the Gulf of Riga. Moderate breezes from some Northerly point prevalent over Scandinavia, and variable airs in most southern regions. Very little change over western Europe later.

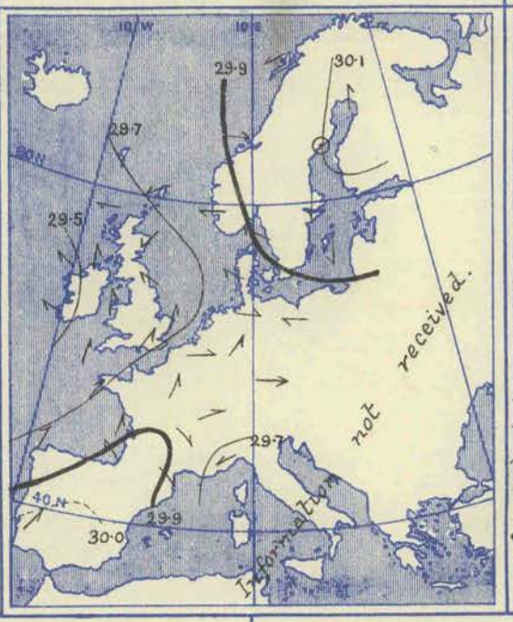
Barometer at 8 a.m. ranging from above 30·0 ins. over the western parts of the Spanish and the Balkan Peninsulas, and from above 29·9 ins. in the north of Scandinavia, to below 29·6 ins. in a small minimum near Riga, and to less than 29·4 ins. in another small system with its centre over the Isle of Wight. No general change over the western regions during day. Depression over Isle of Wight moving to central England by evening, and becoming rather more shallow.

Saturday, 2nd May, 1903.

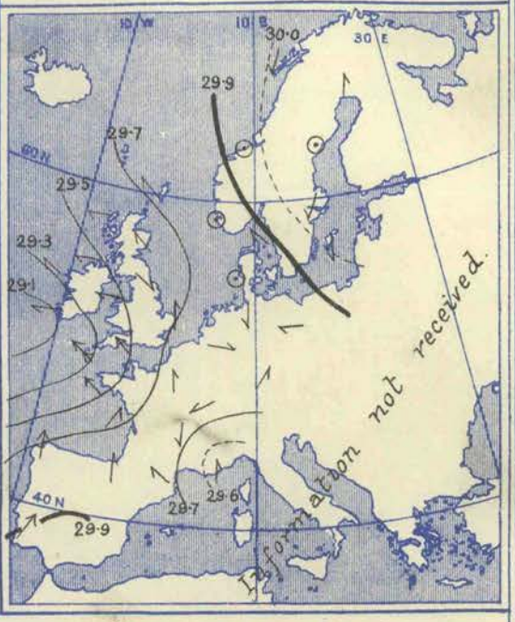
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather. The reports from Algeria and the greater part of Europe not received, but in most western regions cloudy or overcast skies prevailing, with rain in several parts of the United Kingdom, at Corunna, Fanö, Cuxhaven, and in Gothland. Foggy on the north-east coast of Great Britain. Rain falling later on the west coasts of Spain and Portugal, in the west and north-west of France, at nearly all our own stations, and in a few parts of Germany and Scandinavia. Largest amounts, 0·9 in. at Frankfürt, 0·7 in. at Roche's Point and Scilly, and 0·6 in. at Lorient and Brest.

Temperature risen except in Sweden. Mornings readings highest, 69° at Berlin, 58° at Lisbon, 57° at Corunna, 55° at Sanguinaires. Lowest, 31° at Haparanda, 38° at Wisby, 43° at Aberdeen and in the Shetlands, 44° at Belfort, and 47° at Paris, Liverpool, Malin Head, and Stornoway. Rising later to 73° at Berlin, 71° at Perpignan, 64° at Rochefort, and to 65° in London. Remaining below 50° on the east coast of Scotland, and below 40° in the north of Sweden.

Wind light or moderate from South or South-West over the Peninsula, the major portion of France, and the more southern counties of England, and drawing into South-East or East over our northern coasts, Denmark, and Norway. Northerly in the south of Sweden, variable in Germany, and North-Easterly or North-Westerly in the south-east of France. Backing to South-East from over all our south-western districts during day, and increasing considerably in force. Fresh gales prevailing by evening at Scilly and Roche's Point.

Barometer risen except in the west of Ireland. Morning readings ranging from above 30·1 ins. over the Gulf of Bothnia, and from 30·7 ins. at Lisbon, to 29·5 ins. and less over and to the westward of Ireland, and to below 29·7 ins. over the Gulf of Genoa. Barometer falling very generally later—decidedly on our south-west coasts—and gradients becoming steep over Ireland, the south-west of England, and the Bay of Biscay.

IV.—GENERAL NOTES, etc.

During the whole of this period barometric pressure was highest in a large anticyclonic area stretching westwards from Siberia or northern Russia to Finland, and relatively high—at first over the southern parts of Spain and Morocco, and subsequently in the same latitude further east. Most of the low-pressure systems were shallow, and advanced or spread eastwards over the United Kingdom from the Atlantic. Some of these disturbances gradually filled up over our Islands or their vicinity, while others spread eastwards and formed secondary depressions over central Europe. During the earlier days of the period, the south-eastern portion of Europe was also under the influence of a disturbance, which travelled eastwards from Malta to the Grecian Archipelago, and thence north-eastwards to the Black Sea. From that position it moved north-westwards to the Gulf of Riga, where it slowly dispersed. With this distribution of pressure, the winds over the southern and south-western countries were mainly between South and West, while in the north they were from some Northerly or Easterly point. They had but little force as a rule, but occasionally freshened to a strong breeze at some southern regions; at Athens on Monday, and at San Fernando on Thursday, the wind attained the force of a fresh gale, and a similar velocity was also experienced for a time on parts of our own south-west coasts during the latter part of Saturday. The weather was mostly dry over Italy, Greece, and Russia, the north of Scandinavia, and the major portion of central Europe, but over the countries bordering the Atlantic and the North Sea rain was very frequent and at times heavy. Temperature showed a marked upward tendency generally, especially over Russia, Finland, and Scandinavia.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 98.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	6·8	− 20·6	6	− 28
STRATHPEFFER SPA	19·0	− 17·0	18	− 16
EDINBURGH	4·9	− 27·7	5	− 26
COCKLE PARK	11·4	—	11	—
NEWCASTLE-ON-TYNE	2·8	—	3	—
YORK				
CROMER	38·0	—	27	—
LOWESTOFT	36·8	—	36	—
HOLLESLEY BAY	38·4	—	38	—
DUNMOW	23·5	—	23	—
SHEFFIELD	20·1	—	20	—
WORKSOP	18·5	− 15·7	18	− 15
THURCASTON	18·1	− 17·9	18	− 17
TUNBRIDGE WELLS	27·6	—	27	—
MARGATE	37·0	− 2·8	36	− 3
BROADSTAIRS	42·5	—	42	—
RAMSGATE	—	—	—	—
EASTBOURNE	31·4	− 13·8	31	− 14
BRIGHTON	25·1	− 19·2	25	− 19
WORTHING	26·4	—	26	—
BOGNOR	†		†	
WATERGATE PARK	18·9	—	19	—
WESTBOURNE	29·1†	− 16·9	29†	− 17
VENTNOR HOSPITAL	28·8	− 18·2	29	− 18
BOURNEMOUTH	35·0	—	34	—
MARLBOROUGH	19·2	− 18·3	19	− 18
SOUTHPORT	22·4	—	22	—
RHYL	22·2	—	22	—
ABERDOVEY	27·3†	—	27†	—
TENBY				
TORQUAY	21·1	− 24·2	21	− 24
NEWQUAY	24·6	− 19·9	24	− 20
GUERNSEY	34·6†	− 16·6	34†	− 17

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Vol. XX, No. 9, p. 50.	Hillington	—	—	—	33·7	40·9	+ 0·8	—	82	—	—	—	—	—	—	—
,, ,, 10, p. 56.	,,	—	—	—	34·3	42·2	+ 1·4	—	22	—	—	—	—	—	—	—
,, ,, 11, p. 62.	,,	—	—	—	39·4	46·0	+ 4·6	39	7	—	—	—	—	—	—	—
,, ,, 12, p. 68.	,,	—	34	—	42·0	50·8	+ 8·3	62	0	—	—	—	—	—	—	—
,, ,, 15, p. 86.	,,	48	—	—	—	—	—	—	—	—	—	—	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 18.] *Third Series.* WEEK ENDING SATURDAY, MAY 9TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 104.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	56	30	49·3	39·5	44·1	2 below	25	−13	7	− 3	244	− 21	465	− 51
	1. SCOTLAND, EAST	57	29	49·2	39·7	44·2	2 below	25	−21	6	− 4	309	− 31	486	− 83
	2. ENGLAND, N.E.	61	38	49·4	42·1	45·5	2 below	25	−20	0	− 6	412	+ 70	339*	−132
	3. ENGLAND, EAST	66	35	57·7	44·6	50·8	2 above	62	+ 4	0	− 6	533	+ 96	322	−195
	4. MIDLAND COUNTIES	63	35	54·7	43·2	48·7	0 (average)	47	−12	0	− 7	489	+ 24	351	−174
	5. ENGLAND, SOUTH	64	36	56·1	45·8	50·7	1 above	61	− 4	0	− 3	561	+ 61	208	−176
Principal Grazing Districts.	6. SCOTLAND, WEST	61	39	52·3	42·8	47·2	1 below	36	−15	0	− 6	368	− 3	314	− 91
	7. ENGLAND, N.W.	61	39	52·8	44·0	48·1	1 below	43	−10	0	− 4	441	+ 54	258	−125
	8. ENGLAND, S.W.	62	40	57·1	46·3	51·4	2 above	66	+ 7	0	− 2	584	+ 81	162	−135
	9. IRELAND, NORTH	59	38	52·5	44·4	48·3	0 (average)	44	− 8	0	− 4	412	− 32	286	− 56
	10. IRELAND, SOUTH	64	40	56·7	45·3	50·7	1 above	61	+ 2	0	− 2	588	+ 27	183	− 64
	— CHANNEL ISLANDS	59	46	56·2	48·4	52·0	1 above	70	+ 3	0	0	728	+107	49	− 68

Rainfall.

	DISTRICTS. (See p. 104.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	5	1 less	97	+19	28·2	+11·6
	1. SCOTLAND, EAST	5	8	4 more	82	+16	14·9	+ 5·5
	2. ENGLAND, N.E.	6	14	10 more	69	+ 7	8·5*	+ 1·2
	3. ENGLAND, EAST	6	11	7 more	62	− 2	7·1	+ 0·2
	4. MIDLAND COUNTIES	7	19	14 more	68	+ 8	11·4	+ 3·1
	5. ENGLAND, SOUTH	6	11	7 more	72	+13	10·8	+ 2·2
Principal Grazing Districts.	6. SCOTLAND, WEST	5	10	4 more	93	+24	25·3	+ 9·2
	7. ENGLAND, N.W.	7	15	10 more	83	+18	15·1	+ 5·2
	8. ENGLAND, S.W.	6	11	6 more	81	+14	16·5	+ 4·0
	9. IRELAND, NORTH	6	7	2 more	97	+19	16·7	+ 5·8
	10. IRELAND, SOUTH	5	8	3 more	90	+19	18·5	+ 5·1
	— CHANNEL ISLANDS	6	8	3 more	85	+14	11·6	+ 1·2

Bright Sunshine.

	DISTRICTS. (See p. 104.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	12	−24	11	−22	271	− 93	20	− 7
	1. SCOTLAND, EAST	8	−31	7	−28	311	− 93	22	− 7
	2. ENGLAND, N.E.	5	−33	5	−31	349*	− 71	25	− 5
	3. ENGLAND, EAST	19	−25	19	−24	439	− 28	31	− 2
	4. MIDLAND COUNTIES	8	−29	8	−27	359	− 40	25	− 3
	5. ENGLAND, SOUTH	29	−16	28	−16	438	− 27	31	− 2
Principal Grazing Districts.	6. SCOTLAND, WEST	11	−33	11	−31	320	− 94	23	− 7
	7. ENGLAND, N.W.	13	−33	12	−31	373	− 36	27	− 3
	8. ENGLAND, S.W.	37	− 6	35	− 6	419	− 74	30	− 5
	9. IRELAND, NORTH	9	−31	8	−29	310	− 97	22	− 7
	10. IRELAND, SOUTH	22	−22	21	−20	360	−102	26	− 7
	— CHANNEL ISLANDS	45	− 8	44	− 7	522	− 35	37	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was exceedingly unsettled, with frequent rain in all districts, and with occasional thunderstorms in most parts of England and Wales, as well as at one or two of the Irish stations.

Temperature was slightly below the mean over all the more northern parts of Great Britain. In the Midland Counties and Ireland S. it agreed very closely with the normal, while in all the southern districts it was a trifle above it. The highest readings were observed, as a rule, during the first three days of the week, when the thermometer rose to 60° and upwards in all the English districts and in Scotland W. and Ireland S., to 64° in England S., and to 66° in England E. In Scotland N. and E. the thermometer rose very little above 55°. The lowest readings were observed during the latter half of the week, when the thermometer fell below 40° in all but the south-western districts (including the Channel Islands); in England E., and the Midland Counties it fell to 35°, in Scotland N. to 30°, and in Scotland E. (at Braemar) to 29°.

Rainfall was in excess of the average in all districts excepting Scotland N. In Ireland and the Channel Islands the excess was not large, but in all the English districts it was very considerable, the total amount in England N.E., S., and N.W. being about three times, and in the Midland Counties nearly four times, as much as the normal.

Bright Sunshine was very deficient, especially over the northern half of the United Kingdom. The percentage of the possible duration ranged from 44 in the Channel Islands, 35 in England S.W., and 28 in England S., to 10 or less in most of the northern and central districts, to 7 in Scotland E., and to only 5 in England N.E.

Barometer and Wind.—During the earlier days of this period the cyclonic disturbance which had arrived off our south-west coasts at the close of the preceding week spread slowly north-eastwards, and eventually embraced the whole of north-western Europe, the system in the meantime gradually becoming shallower. During these movements the wind, which was at first Easterly, backed to North-East and North in the north, and shifted to South or South-West in the south, but was generally light or moderate in force. In the course of Thursday the depression, which had now reached the North Sea, entirely dispersed, but at night another low-pressure area appeared in the south-west, so that the wind returned to the Eastward very generally. At the close of the week the new disturbance was apparently moving away again over the Atlantic, but a shallow secondary system, which had been developed over France, was advancing slowly northwards along the east coasts of England, and with this change the wind was backing to the Northward in most of our eastern districts.

207 | 90 Wy. & S. Ltd.
319 | 70 1º | 02

II.—DATA from which the SUMMARY on page 103 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	48	37	46·3	40·6	43·3	− 0·4	15	4	5	0·12	− 0·31	*	*	*	*
	Stornoway	55	35	50·3	38·9	44·3	− 1·3	29	9	6	0·57	+ 0·01	29·5	− 11·0	27	− 10
	Wick	53	35	48·0	38·4	42·9	− 2·9	21	10	4	0·82	+ 0·42	*	*	*	*
	Lairg $	56	30	48·8	37·8	43·0	− 1·8	25	12	7	0·86	+ 0·35	*	*	*	*
	Glencarron $	56	35	49·9	38·5	43·9	− 2·0	28	10	4	0·55	− 0·50	*	*	*	*
	Fort Augustus $	51	38	48·7	40·7	44·5	− 2·8	23	4	4	0·45	− 0·01	5·5	− 23·5	5	− 21
	Fort William	56	39	52·8	41·9	47·0	− 0·9	35	0	3	0·41	− 0·40	11·8	− 25·7	11	− 24
1. SCOTLAND, E.	Nairn	57	38	51·3	40·7	45·7	− 1·5	31	4	5	0·65	+ 0·30	*	*	*	*
	Aberdeen	54	35	48·0	40·0	43·8	− 2·7	21	6	6	1·41	+ 0·96	12·8	− 28·0	12	− 26
	Braemar $	50	29	47·2	36·1	41·3	− 2·5	15	22	5	0·63	+ 0·13	*	*	*	*
	Ochtertyre $	55	36	51·6	40·3	45·6	− 2·2	32	5	5	0·80	+ 0·27	*	*	*	*
	Leith	55	40	49·6	42·0	45·6	− 2·4	25	0	5	0·63	+ 0·27	*	*	*	*
	Marchmont $	50	36	47·7	38·9	43·0	− 3·0	20	9	6	0·89	+ 0·36	2·8	− 36·1	3	− 34
2. ENGLAND, N.E.	Alnwick Castle	53	38	48·5	40·6	44·3	− 1·7	22	4	5	0·81	+ 0·35	*	*	*	*
	Durham	60	40	49·1	41·3	45·0	− 2·0	24	2	6	1·83	+ 1·39	7·6	− 28·5	7	− 26
	Shields	51	40	47·4	41·7	44·4	− 2·2	18	1	6	1·24	+ 0·88	*	*	*	*
	Scarborough Ⓜ	52	38	48·7	40·6	44·4	− 3·0	23	4	4	0·88	+ 0·44	7·4	—	7	—
	Spurn Head	50	43	48·1	44·1	46·0	− 1·7	28	0	7	2·35	+ 2·00	*	*	*	*
	Fulbeck (Lincolnshire)	61	41	54·7	44·0	49·0	+ 0·3	49	0	7	1·48	+ 1·07	3·8	—	4	—
3. ENGLAND, E.	Hillington Ⓜ	62	38	58·6	45·1	51·5	+ 2·7	67	0	7	1·39	+ 0·99	9·1	− 34·5	9	− 33
	Yarmouth	58	43	54·9	44·9	49·6	+ 1·9	53	0	6	1·12	+ 0·73	*	*	*	*
	Geldeston	64	40	59·4	44·3	51·4	+ 2·7	66	0	5	1·21	+ 0·84	22·7	− 24·0	21	− 23
	Cambridge	66	38	60·5	44·2	51·9	+ 2·0	69	0	7	1·38	+ 1·00	21·7	− 21·5	21	− 20
	Felixstowe	61	42	55·3	45·3	50·0	+ 1·7	56	0	5	0·61	—	39·3†	—	38†	—
	Rothamsted	60	35	57·2	43·5	49·9	+ 1·2	55	0	6	0·88	+ 0·43	20·2	− 21·5	19	− 21
	Shoeburyness	61	38	57·7	45·1	51·0	+ 2·3	63	0	4	0·87	+ 0·57	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	52	39	48·3	40·9	44·4	− 2·5	21	3	6	2·66	+ 2·24	1·0	—	1	—
	Bawtry (Hesley Hall)	57	40	52·6	43·6	47·8	− 1·2	41	0	7	1·83	+ 1·41	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	60	39	56·6	43·9	49·9	+ 0·4	55	0	7	1·66	+ 1·26	*	*	*	*
	Cheadle Ⓜ	57	41	51·8	43·6	47·5	0·0	39	0	7	1·17	+ 0·68	*	*	*	*
	Birmingham (Edgbaston)	58	41	54·0	44·8	49·1	+ 0·7	50	0	5	1·27	+ 0·78	7·2	—	7	—
	Churchstoke Ⓜ	61	36	56·7	41·6	48·7	+ 1·2	49	1	7	1·81	+ 1·36	16·1	− 25·2	15	− 24
	Hereford Ⓜ	63	40	58·9	43·7	50·8	+ 1·0	62	0	7	2·38	+ 1·93	*	*	*	*
	Cirencester	61	35	56·9	42·0	49·0	+ 0·5	49	0	7	2·18	+ 1·73	16·3	− 27·1	16	− 26
	Oxford	61	41	56·9	45·1	50·7	+ 0·7	61	0	6	1·68	+ 1·30	15·3	− 26·2	15	− 25
5. ENGLAND, S.	London	64	40	59·1	45·6	52·0	+ 0·8	70	0	6	1·32	+ 0·95	10·3‡	− 27·3‡	10‡	− 26‡
	Swarraton (Alresford) Ⓜ	63	36	56·5	44·2	50·0	+ 1·6	56	0	7	1·78	+ 1·34	*	*	*	*
	Dungeness	57	39	54·9	45·9	50·1	+ 0·4	57	0	4	0·60	+ 0·30	29·9	—	29	—
	Hastings (St. Leonards)	56	42	53·4	46·1	49·5	− 0·5	53	0	5	0·92	+ 0·54	27·6	− 21·9	27	− 21
	Southampton	62	42	58·8	47·3	52·7	+ 1·5	75	0	6	1·14	+ 0·71	37·1	− 9·2	36	− 9
	Portland Bill	56	45	54·6	46·9	50·5	+ 0·2	60	0	5	0·58	—	*	*	*	*
	Shaftesbury Ⓜ	59	42	55·3	44·9	49·8	+ 1·0	55	0	6	1·15	+ 0·64	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	55	40	53·9	42·6	47·9	− 0·5	41	0	3	0·23	− 0·61	*	*	*	*
	Glasgow	53	40	49·7	42·1	45·7	− 2·1	26	0	4	0·98	+ 0·46	8·0	− 27·3	7	− 25
	Cally $	61	40	53·5	42·6	47·7	− 0·5	40	0	5	1·23	+ 0·60	*	*	*	*
	Aspatria	59	39	52·4	42·4	47·1	− 0·2	36	0	7	1·42	—	16·8	—	16	—
	Douglas (Isle of Man)	56	41	51·8	44·2	47·8	− 0·2	41	0	5	1·34	+ 0·82	9·3	− 39·2	9	− 36
7. ENGLAND, N.W.	Newton Reigny	61	39	52·2	41·3	46·4	+ 0·1	34	2	7	1·82	—	16·5	—	15	—
	Stonyhurst	55	42	51·8	43·6	47·5	− 0·7	39	0	7	1·86	+ 1·27	7·3	− 33·6	7	− 31
	Blackpool Ⓜ	58	41	53·6	44·0	48·5	− 0·4	46	0	7	1·96	+ 1·51	9·8	− 31·9	9	− 30
	Manchester (Prestwich)	58	40	51·9	43·6	47·5	− 0·7	39	0	7	1·74	+ 1·24	6·4	—	6	—
	Liverpool Obsy. (Bidston)	58	42	53·1	44·9	48·8	− 0·8	48	0	7	1·45	+ 1·05	8·2	—	8	—
	Chester (Hawarden Bridge)	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Llandudno Ⓜ	61	42	54·3	45·1	49·4	− 0·3	52	0	6	0·76	+ 0·36	8·4	− 34·0	8	− 32
	Holyhead	58	43	52·9	45·4	48·9	− 0·5	48	0	5	0·71	+ 0·29	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	57	47	55·6	47·4	51·3	+ 2·4	65	0	4	0·44	0·00	41·5	− 6·5	40	− 6
	Clifton	60	44	57·2	47·2	51·9	+ 2·1	69	0	6	1·04	+ 0·52	*	*	*	*
	Bath	62	42	58·0	45·9	51·6	+ 1·5	67	0	7	2·60	+ 2·15	18·1	—	17	—
	Arlington (N. Devon)	60	42	56·0	44·6	50·0	+ 1·8	56	0	7	1·17	+ 0·53	*	*	*	*
	Cullompton Ⓜ	61	40	58·6	44·7	51·2	+ 0·9	64	0	6	1·48	+ 0·98	31·7	− 10·7	31	− 10
	Falmouth	58	44	56·7	47·6	51·9	+ 1·6	69	0	6	0·77	+ 0·17	47·1	− 2·3	45	− 2
	Plymouth	59	42	57·4	46·7	51·7	+ 0·4	68	0	5	0·38	− 0·09	41·9	− 4·2	40	− 4
9. IRELAND, N.	Malin Head	52	41	49·0	44·0	46·4	− 1·9	31	0	7	0·76	+ 0·30	*	*	*	*
	Edenfel (Omagh)	59	39	54·6	43·4	48·7	+ 1·0	47	0	5	0·57	+ 0·02	*	*	*	*
	Blacksod Point	55	44	51·6	47·0	49·2	− 0·2	50	0	5	0·60	− 0·03	*	*	*	*
	Markree Castle	59	38	55·6	44·1	49·5	+ 1·3	53	0	6	0·45	− 0·11	8·3	− 31·3	8	− 29
	Armagh	56	41	54·3	44·1	48·9	+ 0·6	48	0	6	0·55	+ 0·07	8·8	− 30·0	8	− 28
	Donaghadee	53	42	50·1	43·9	46·8	− 1·6	34	0	7	1·29	+ 0·82	*	*	*	*
10. IRELAND, S.	Dublin	59	42	54·2	45·4	49·5	− 0·8	53	0	6	0·48	+ 0·04	9·1	− 35·9	9	− 34
	Birr Castle	60	40	57·4	44·3	50·5	+ 1·3	60	0	6	0·41	− 0·09	24·3	− 15·6	23	− 15
	Kilkenny	60	40	56·1	44·9	50·2	+ 0·7	57	0	6	1·07	+ 0·57	*	*	*	*
	Waterford	61	43	57·3	46·6	51·6	+ 2·2	67	0	5	1·28	+ 0·73	*	*	*	*
	Roche's Point	59	45	56·0	47·6	51·6	+ 0·8	67	0	5	0·39	− 0·28	*	*	*	*
	Valencia	57	41	55·6	43·7	49·3	− 1·5	51	0	4	0·88	+ 0·15	31·9	− 13·0	30	− 12
	Killarney	64	41	59·7	44·6	51·7	+ 1·7	68	0	5	1·16	+ 0·44	*	*	*	*
	Foynes	59	42	57·1	45·2	50·8	+ 1·2	62	0	4	1·08	+ 0·54	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	57	47	55·7	48·4	51·8	+ 0·9	69	0	5	0·19	+ 0·07	55·2	+ 4·6	53	+ 4
	Jersey	59	46	56·6	48·3	52·2	+ 0·4	71	0	6	1·04	+ 0·60	39·4	− 13·3	38	− 13

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked $ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

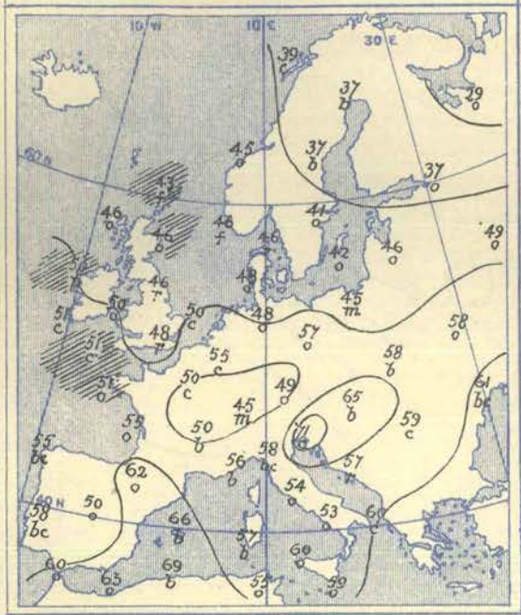
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

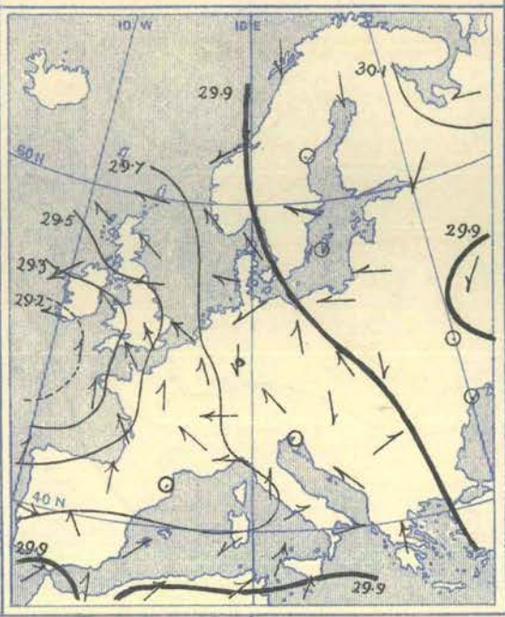
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 3rd May, 1903.

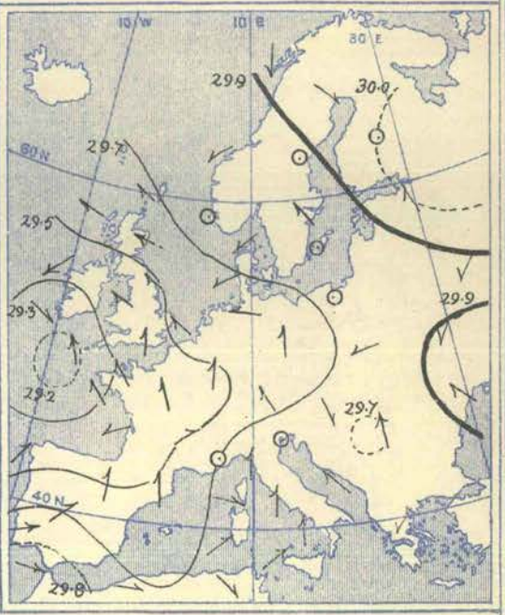
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull very generally, but fine and bright over the south-east of France and the north of Italy, and also at some Algerian and Swedish stations. Rainy in most parts of the United Kingdom, over the Skager Rack, Brittany, and at Oporto, and foggy in the extreme north of Scotland. Considerable falls of rain over our Islands and France later, and also in some Russian districts. Largest amounts, 0·75 in. at Havre, and 0·95 in. at Riga.

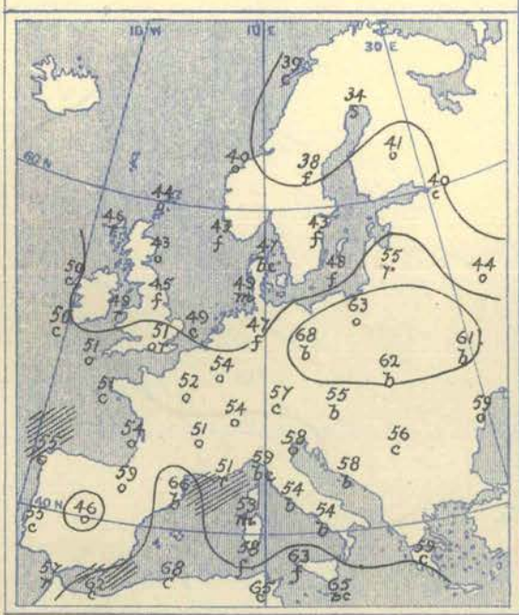
Temperature at 8 a.m. ranging from 71° at Trieste, 69° at Algiers, 68° at Barcelona, 65° at Buda-Pesth, 62° at Athens and Biarritz, and 61° at Odessa, to below 50° over the major portion of our Islands and northern Europe generally, and to below 40° over the northern parts of Scandinavia and Russia. Lowest reading of all 29° at Archangel. Remaining below 50° all day at several stations on our east coasts, but rising to 57° at Nairn, 60° at Parsonstown, and to above 70° over Germany, Austria-Hungary, Algeria, and at a few Italian, French, and Spanish stations. Highest values 82° at Buda-Pesth and Algiers.

Wind light to fresh from South in most Spanish and French districts, and from South-East or East over our Islands, Denmark, and Norway. Light and rather variable over Europe and the Mediterranean as a whole. No great change later.

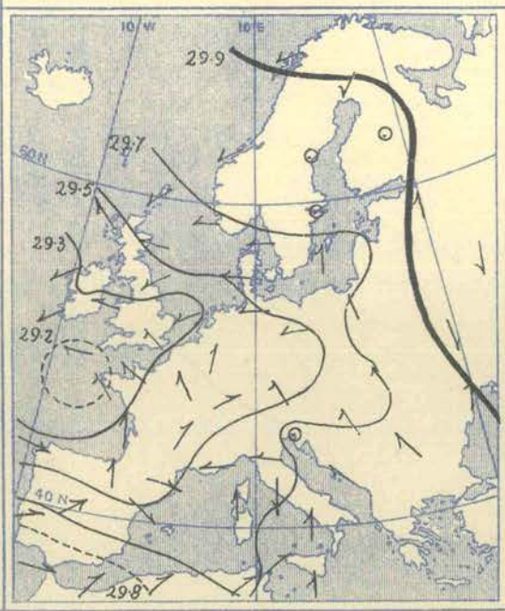
Barometer in morning ranging from above 30·1 ins. over the White Sea, and from about 29·9 ins. on the southern shores of the Mediterranean, to below 29·2 ins. in a depression off our south-west coasts. Latter system remaining almost stationary during day, but secondary disturbances forming in different regions, especially over the Bay of Biscay, the western part of the Mediterranean, over Germany, and in the neighbourhood of Hermanstadt. Pressure decreasing as a whole, but increasing on the west coast of Ireland.

Monday, 4th May, 1903.

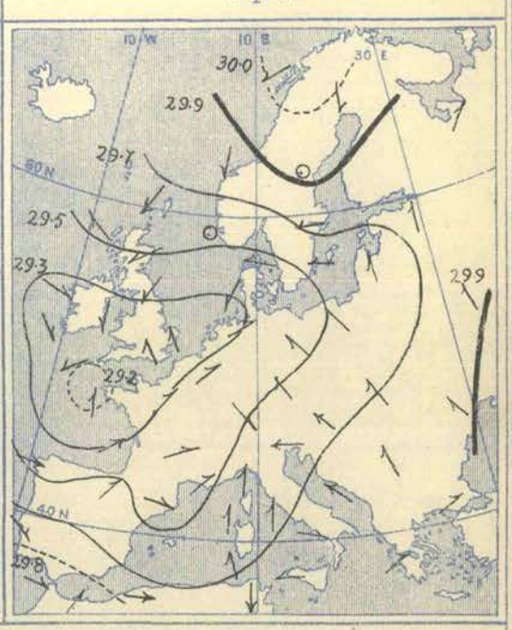
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still cloudy or dull generally, but fine and bright over Italy and central Europe. Rain falling at San Fernando, Nice, and at many of our own stations, and snow at Haparanda and Ulcaborg. Fog prevailing over the Gulf of Bothnia and at Cuxhaven and Skudesnaes. Rain falling in most regions later, but more generally over our Islands and France than elsewhere. Thunderstorms experienced over Denmark, at Cuxhaven and Oxford. Heaviest rainfall 0·79 in. at Belfort, and 1·12 ins. at Harrogate.

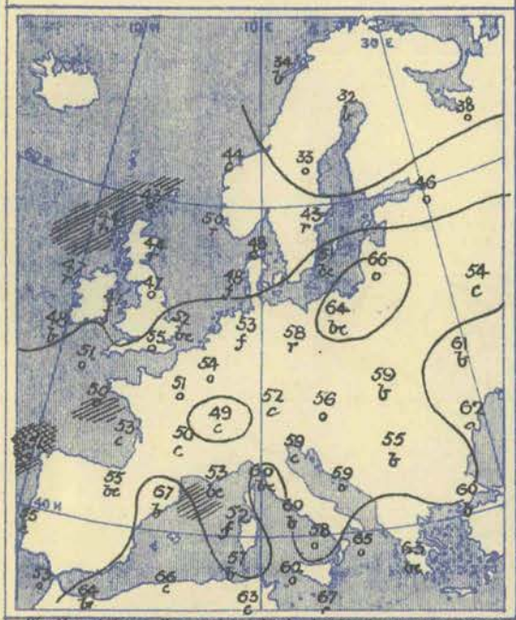
Temperature changed little as a whole, but risen quickly over Germany. Morning readings ranging from 68° at Berlin and Algiers, 66° at Barcelona and Palma, 65° at Malta, and 60° at Pesaro, to 46° at Madrid, 44° at St. Petersburg, Karlstad and Wick, and to 34° at Haparanda. Rising during day to 64° in London, to 70° or above in most parts of central and southern Europe and Algeria. Highest readings, 77° at Algiers and Tunis, 82° at Cracow, and 84° at Berlin.

Wind in morning fresh or strong from the Westward over the Iberian Peninsula, light from the Southward over France and Belgium, and from the Eastward over Holland, Denmark, Norway, and the greater part of our Islands. Light and variable over the east and south-east of our area. A Southerly to South-Easterly current setting in later over Italy, the Adriatic, and central Europe, but little change elsewhere.

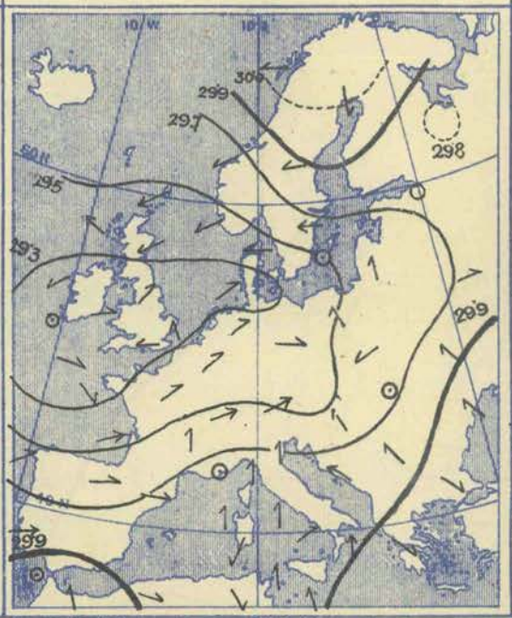
Barometer fallen except over Ireland and central Russia. 8 a.m. readings highest, above 29·9 ins. over Russia and Lapland, and very little lower over Greece and Morocco. *Lowest*, 29·2 ins. and less in a shallow depression off our south-west coasts, and below 29·5 ins. in an irregularly-shaped area embracing the major portion of our Islands, Germany, France, and the north of Spain. Very little change in the general distribution of pressure later; depression moving eastwards to mouth of the English Channel.

Tuesday, 5th May, 1903.

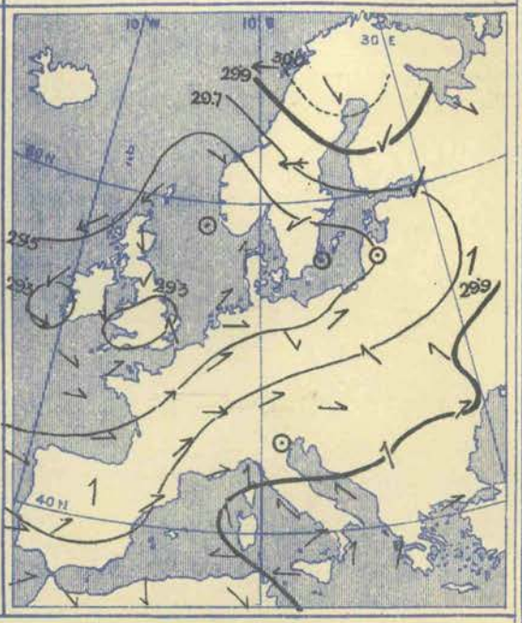
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in Lapland, over the Riviera, the north of Italy, and some parts of Hungary and south-eastern Europe, but cloudy or overcast as a whole, with rain over the north-west and north of France, at Berlin, Stockholm, and Skudesnaes, and also at some Irish and Scotch stations. Fog prevailing at Holyhead, Spurn Head, Cuxhaven, and Fanö. Rain falling in most regions later, but weather remaining dry over Italy and the south-eastern countries. As much as 0·7 in. of rain at St. Petersburg and Faerder, 0·8 in. at Bath, and 0·9 in. at Limoges.

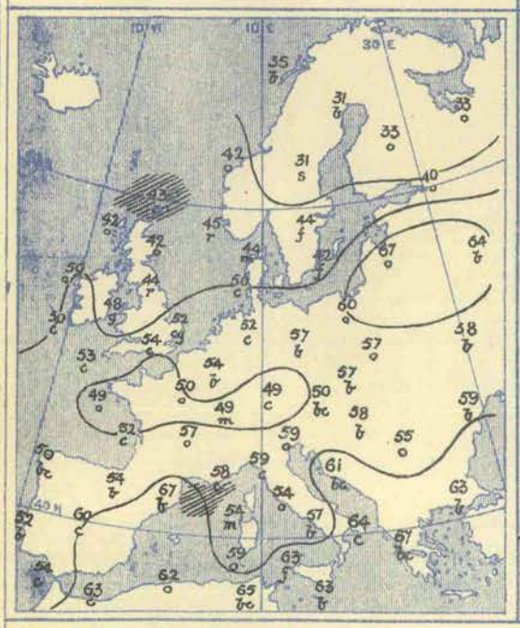
Temperature risen over central and western Russia and the Gulf of Finland, changed irregularly elsewhere. Morning readings ranging from 67° at Malta and Barcelona, 66° at Riga and Algiers, and 65° at Brindisi, to below 50° at most of our own stations, and to below 40° over the northern parts of Scandinavia and Russia. Lowest value, 32° at Haparanda. Rising subsequently to 60° at Parsonstown, 61° in London, to 70° or above over Germany and central and southern Europe generally, to 81° at Tunis, and to 88° at Biskra (inland Algeria). Not exceeding 45° on the north and north-east coast of Scotland, and only touching 49° at Spurn Head.

Wind in morning showing an irregular cyclonic movement around the United Kingdom and the North Sea. Light or moderate in force as a whole, but Westerly current fresh in some southern regions, and that from the Eastward fresh or strong in some parts of Scandinavia and Scotland. No general change either in force or direction during day, but Easterly wind increasing to a gale over the Gulf of Bothnia.

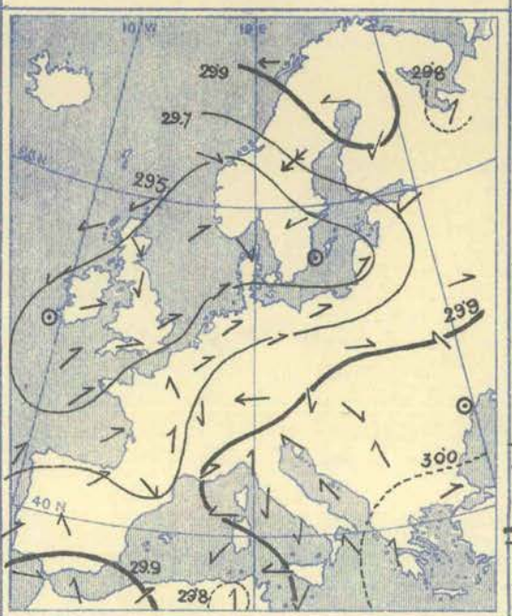
Barometer risen in the south-east, south, south-west, and extreme north of our area, fallen elsewhere. Morning readings highest, 30·0 ins. and upwards (1) over Lapland, and (2) over the south-east of Russia. Lowest, below 29·3 ins. in a large area extending from the Atlantic across Ireland, England, and the extreme north-west of France to Denmark and the western part of the Baltic. Gradients very slight to moderate generally, but rather steep over Scandinavia. Very little change in the distribution of pressure later, but gradients increasing over Sweden and the north of Norway.

Wednesday, 6th May, 1903.

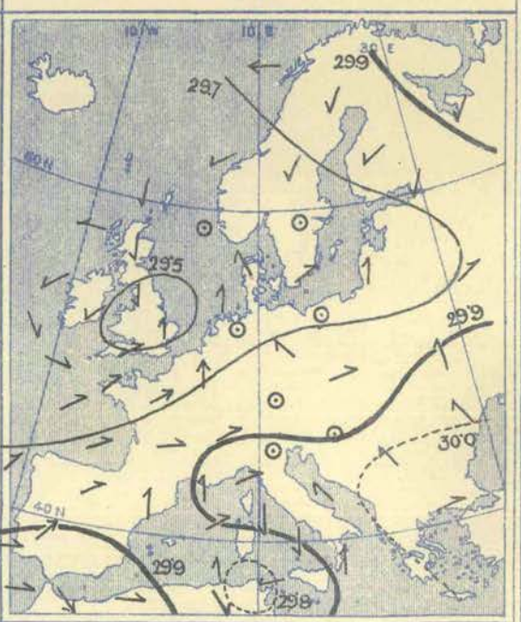
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in Lapland and over the central and south-eastern regions of Europe, but cloudy or dull elsewhere. Rain falling at some French and British stations, and in the south of Scandinavia, and snow at Hernösand. Fog prevalent over the northern part of the Baltic. Rain experienced later over the more northern and western countries generally, and also in some Spanish and Italian localities. Heaviest amounts 0·52 in. at Jersey, 0·55 in. at Hangö, 0·84 in. at Bath, and 0·87 in. at Flushing.

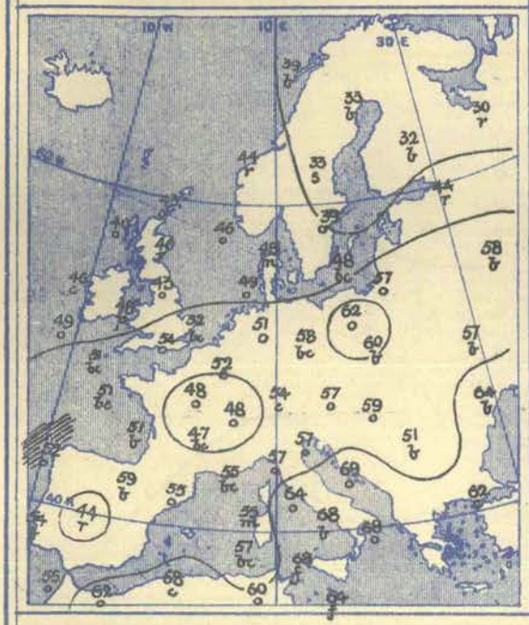
Temperature fallen as a whole. Morning readings highest, (1) 67° at Athens and Barcelona, 65° at La Calle, 64° at Brindisi, and 63° at Malta; (2) 67° at Riga, and 64° at Moscow. Lowest, 31° at Haparanda and Hernösand, 33° at Kuopio and Archangel, 40° at St. Petersburg and Karlstad, and 42° at Aberdeen. Rising later to 61° in London, 70° or more over Germany, Austria-Hungary, and on the shores of the Mediterranean, and to 91° at Biskra. Continuing below 50° in many parts of the United Kingdom, and below 60° at many French stations. Scarcely exceeding the freezing point at Hernösand.

Wind in morning circulating cyclonically around a large area embracing the British Isles the North Sea, Denmark, and the south of Scandinavia. Light to moderate in force generally, but the North-Easterly current over the Gulf of Finland and at Hernösand strong to a gale. Light and variable airs prevailing over Italy and the extreme southern regions. Strong North-Easterly winds in north subsiding later, and a separate cyclonic movement setting in over the Gulf of Finland. No great change elsewhere.

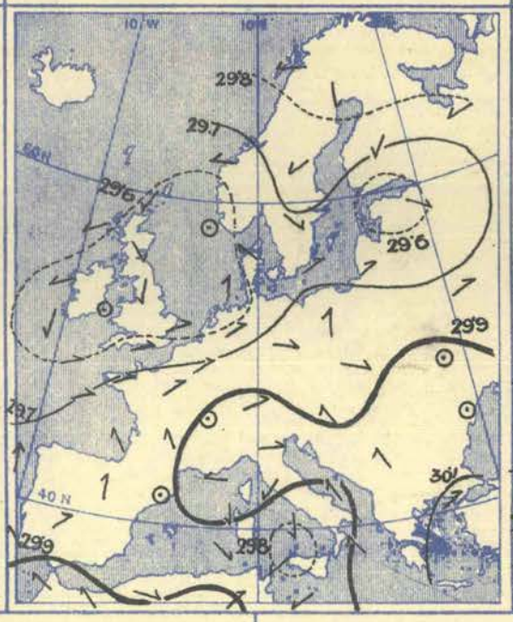
Barometer risen except over Finland and Scandinavia. Readings at 8 a.m. highest, above 30·0 ins. over the south-east of Europe and Asia Minor, and above 29·9 ins. over Lapland, and also over Algeria and the south of Spain. Lowest, below 29·5 ins. in a very large and irregularly shaped area, stretching from off the west of Ireland east-north-eastwards to Riga, and from Brittany north-north-eastwards to Christiansund. Pressure increasing over north-western Europe during day, and low-pressure area breaking into two portions. A shallow depression forming between Sicily and Tunis.

Thursday, 7th May, 1903.

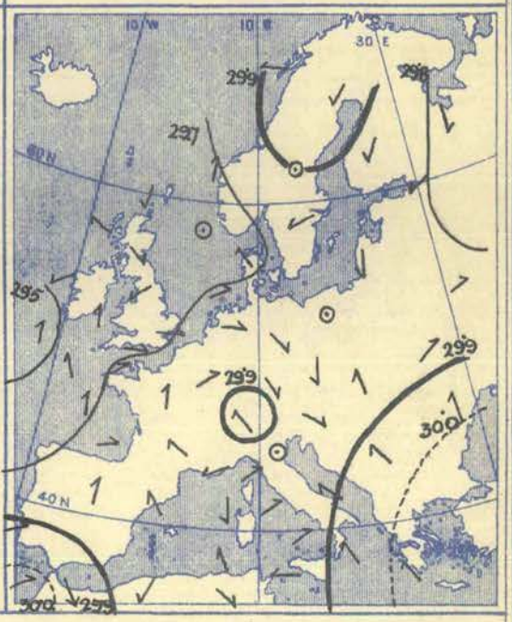
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Lapland and the southern half of Russia; cloudy or dull over our area as a whole, and rainy at Archangel, over the Gulf of Finland, at Christiansund, at Madrid, and in various parts of our Islands. Snow falling at Hernösand. Rain falling during ensuing twenty-four hours in most parts of the United Kingdom, France, Germany, Scandinavia, and Russia. Largest amounts, 0·83 in. at Warsaw. Thunder experienced at Paris and Yarmouth.

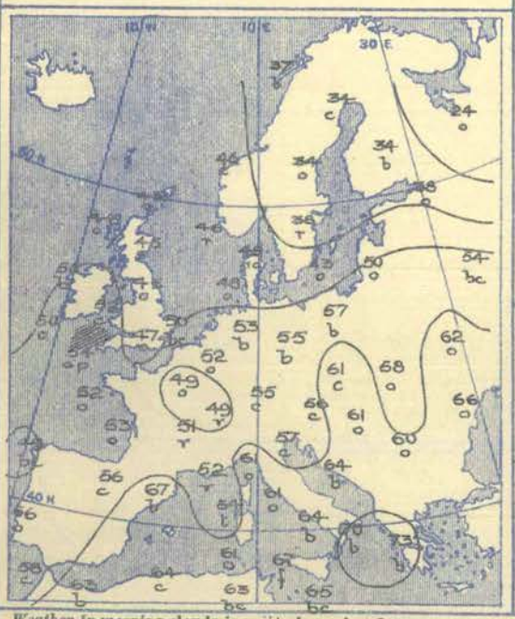
Temperature changed irregularly. Readings at 8 a.m. highest, (1) 69° at Lésina, 68° at Algiers, Brindisi, and Palermo; (2) 62° at Neu-Fahrwasser. Lowest, 30° at Archangel, 33° at Haparanda and Hernösand, 39° at Helsingfors and Stockholm, 40° at Aberdeen, 44° at Madrid, and 46° at Limoges. Remaining below 50° all day at many of our own northern and eastern stations, but exceeding 60° over France and Germany, and 70° over Austria-Hungary, Italy, and Algeria, and touching 86° as Patras, and 91° at Biskra. Maximum at Lisbon only 61°.

Wind in morning showing three light and somewhat irregular cyclonic movements—one around the British Isles and the North Sea, another around the Gulf of Finland, and the third over the south of Italy and its vicinity. Cyclonic circulations less well-marked or entirely dying out by evening, and wind becoming very variable over our area as a whole.

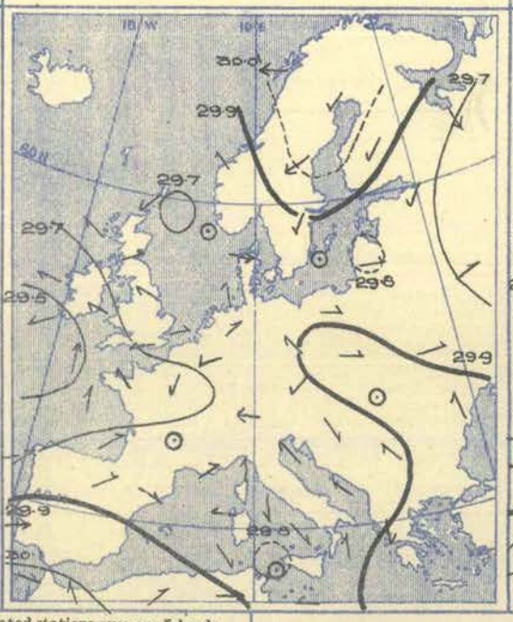
Barometer at 8 a.m. ranging from 30·1 ins. and upwards over the Ægean Sea and Asia Minor, and from above 29·9 ins. over Algeria and Morocco, to 29·8 ins. and less in a depression lying between Sicily and Naples, and to below 29·6 ins. in two other systems—one extending north-eastwards from the Atlantic, across our Islands to the west of Norway, and the other over and in the neighbourhood of the Gulf of Finland. Cyclonic disturbances partially dispersing during day, but a fresh fall of the mercury taking place in the west of Ireland.

Friday, 8th May, 1903.

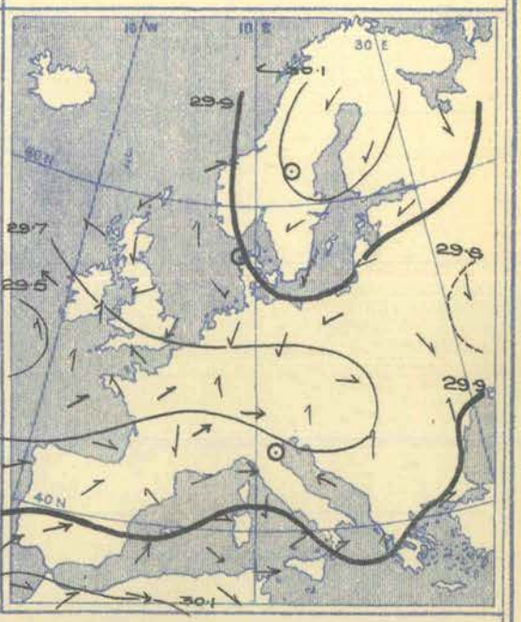
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy in most places, but fine at several isolated stations over our Islands, as well as in south-eastern Europe. Rain falling over southern and central France, and at Stockholm, and a thunderstorm reported from Sanguinaires. Rain later over the greater part of our Islands and the neighbouring Continental countries, and thunder occurring at Holyhead and lightning at Blacksod Point.

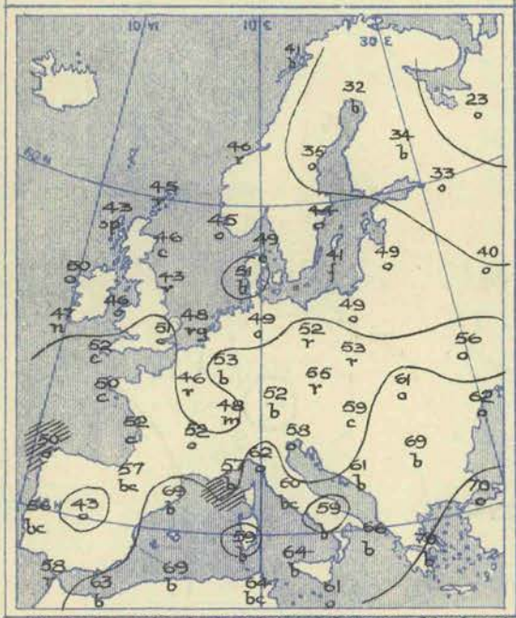
Temperature risen over our Islands generally, and at many of the Continental stations, fallen over western Russia. Morning readings highest, 73° at Patras, 70° at Brindisi, 67° at Barcelona and Palermo, and 65° at Malta, above 60° over southern and south-eastern Europe generally. Lowest, 24° at Archangel, 34° at Kuopio, Haparanda, and Hernösand, and 35° at Uleaborg. Lowest, in our Islands—44° at several stations in the north of Scotland. Rising subsequently to rather above 55° over the greater part of Ireland and England, exceeding 60° in France and Germany, and reaching 70° or more in many parts of southern Europe, the highest readings of all being 82° at Buda-Pesth and Patras, and 86° at Constantinople.

Wind showing a cyclonic circulation over the western parts of our Islands, being Southerly over our south-western districts, and the west of France. South-Easterly in the south of England, and Easterly in Ireland. Light and variable airs reported from our own eastern counties and the North Sea, and also over the Continent generally, but Northerly and North-Easterly in northern Russia. Becoming more Southerly in Ireland later, but no material change beyond a freshening of the wind over the Mediterranean.

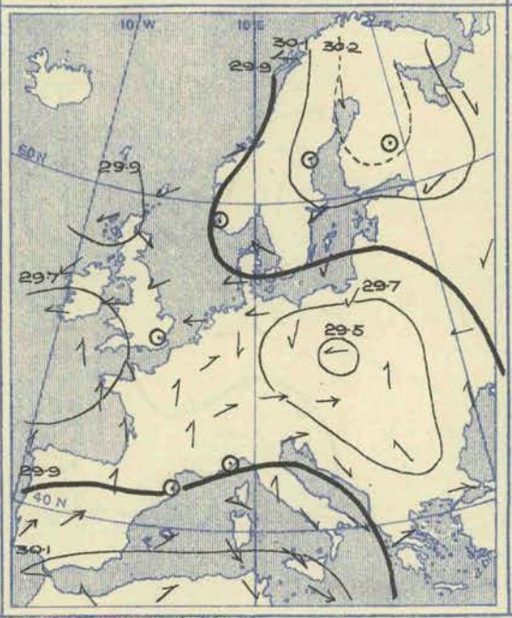
Barometer risen in most places, but fallen in the west of Ireland. Morning readings lowest, 29·5 ins. and less in a depression off the south-west of our Islands, and 29·7 ins. and less in a shallow low-pressure area over central Russia. Highest, 30·1 ins. and more over Algeria, and 30·0 ins. and more over the north of Scandinavia and the Gulf of Bothnia. Depression off our south-west coasts filling up later, and northern high pressure area increasing somewhat in intensity.

Saturday, 9th May, 1903.

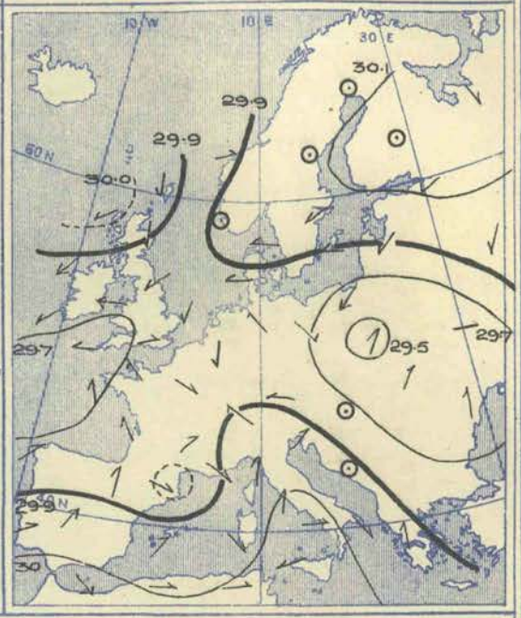
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy and unsettled over our Islands and the neighbouring Continental countries, with rain in the east of England, in many parts of France and Germany, as well as at Christiansund; fine over southern Europe and the Mediterranean. Rain falling later over our Islands, France, and Germany, and a heavy thunderstorm passing over the Metropolis during the afternoon, the accompanying rainfall varying greatly in different localities, the amount measured at Westminster being as much as 0·9 in.

Temperature changed rather irregularly, but fallen somewhat in most places. Morning readings highest, 70° at several stations over south-eastern Europe, 69° at Barcelona, Algiers and Hermanstadt, 66° at Brindisi and Palma, 64° at Palermo and Tunis. Above 60° over southern Europe generally. Lowest, 23° at Archangel, 32° at Haparanda, 33° at St. Petersburg, and 34° at Kuopio. Lowest in our Islands, 43° at Stornoway, Shields, and Spurn Head. Rising later to 55° and upwards over England, and to 60° in London, exceeding 60° over France and Germany, reaching 70° and more at several southern European stations, and touching 84° at Brindisi, and 86° at Athens.

Wind Easterly over the greater part of our Islands, and light to fresh in force. A complete cyclonic circulation shown over eastern Germany, being Easterly and North-Easterly over Scandinavia and Denmark, Northerly over western Germany, and Southerly over south-eastern Europe. Moderate from West and South-West over southern Europe and the Mediterranean. No change of importance later, but wind becoming more Southerly over the southern districts.

Barometer fallen decidedly over central Europe, risen elsewhere. Highest, 30·2 ins. and upwards over northern Europe, and 30·1 ins. and upwards over northern Africa and the southern part of the Mediterranean. Lowest, 29·5 ins. and less over eastern Germany, and 29·7 ins. and less in a shallow system off the south-west of our Islands. Depression over Germany moving somewhat to the eastwards later, that off our south-west coasts travelling slowly in a South-Easterly direction and filling up.

IV.—GENERAL NOTES, etc.

During the earlier half of this week barometrical pressure was high over the extreme northern parts of Russia and Scandinavia, and also over Algeria and the south of Spain. In the western and central countries the weather was affected by a large and complex cyclonic system, which appeared in the first instance off our south-west coasts, and which ultimately spread slowly north-eastwards over the whole of our Islands and the North Sea. Numerous small secondaries were at the same time developed over France, Germany, Denmark, and the Baltic, so that very changeable conditions prevailed over western Europe generally, with heavy rain in many places, and with thunderstorms in most of the English districts, as well as at some of the French stations. Over France, the Netherlands, and the southern parts of the United Kingdom, the wind was chiefly Southerly (veering from South-East to South-West), but in the northern parts of western Europe, the South-Easterly breezes, prevailing at the commencement of the week were followed by a backing to East and North-East, the weather being extremely cool in Scotland and the north of England.

On Thursday the large cyclonic disturbance (which had been gradually filling up ever since its first appearance) entirely dispersed. On Friday, however, a new low-pressure area appeared off our south-west coasts, so that the wind again shifted to the Eastward over the whole of the United Kingdom, a considerable freshening occurring at some of our western stations. At the close of the week the south-western disturbance was dispersing, but a well-marked secondary system, which had been developing over France, advanced northwards to the east of England, and occasioned heavy rain in many parts of our eastern and south-eastern counties, with a severe thunderstorm in London.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 104.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	6·3	- 32·4	6	- 29	SHEFFIELD	1·9	—	1	—	WESTBOURNE	41·2†	- 7·1	40†	- 7
STRATHPEFFER SPA	8·4	- 28·2	8	- 26	WORKSOP	1·5	- 34·9	1	- 33	VENTNOR HOSPITAL	35·3	- 13·7	34	- 13
EDINBURGH	7·4	- 27·6	7	- 25	THURCASTON	6·4	- 31·9	6	- 30	BOURNEMOUTH	—	—	—	—
COCKLE PARK	7·6	—	7	—	TUNBRIDGE WELLS	23·4	—	22	—	MARLBOROUGH	17·0	- 22·6	16	- 22
NEWCASTLE-ON-TYNE	4·8	—	4	—	MARGATE	34·5	- 7·3	33	- 7	SOUTHPORT	4·9	—	5	—
YORK	0·2	- 38·3	0	- 36	BROADSTAIRS	34·7	—	33	—	RHYL	14·0	—	13	—
CROMER	17·9	—	17	—	RAMSGATE	—	—	—	—	ABERDOVEY	33·6†	—	32†	—
LOWESTOFT	30·9	—	29	—	EASTBOURNE	30·0	- 18·1	29	- 18	TENBY	36·0	- 12·0	34	- 11
HOLLESLEY BAY	27·4	—	26	—	BRIGHTON	30·8	- 15·6	30	- 15	TORQUAY	36·9	- 10·6	36	- 10
DUNMOW	16·6	—	16	—	WORTHING	37·2	—	36	—	NEWQUAY	39·4	- 7·2	38	- 7
					BOGNOR	44·9†	—	43†	—	GUERNSEY	40·4†	- 14·0	39†	- 14
					WATERGATE PARK	31·3	—	30	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean or th Week.
Week ending April 18th, 1903.	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	57·3	—	60	—
,, ,, 25th, ,,	,,	—	—	—	—	—	—	—	—	—	—	—	31·3	—	32	—
,, May 2nd, ,,	Tenby	—	—	—	—	—	—	—	—	—	—	—	25·8	- 20·9	25	- 21
,, ,, ,, ,,	York	—	—	—	—	—	—	—	—	—	—	—	14·0	- 21·8	14	- 21

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 19.] *Third Series.* WEEK ENDING SATURDAY, MAY 16TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 110.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	30	49·8	37·9	43·5	3 below	28	−14	11	+ 4	272	− 35	476	− 47
	1. SCOTLAND, EAST	62	29	52·6	39·6	45·7	2 below	36	−15	7	+ 2	345	− 46	493	− 81
	2. ENGLAND, N.E.	63	29	52·9	40·9	46·6	2 below	37	−13	3	0	449	+ 57	342	−132
	3. ENGLAND, EAST	63	31	55·8	41·6	48·3	2 below	46	−18	1	− 2	579	+ 78	323	−197
	4. MIDLAND COUNTIES	62	29	53·3	40·7	46·6	3 below	38	−27	4	0	527	− 3	355	−174
	5. ENGLAND, SOUTH	60	31	54·7	42·7	48·3	3 below	44	−27	0	− 1	605	+ 34	208	−177
Principal Grazing Districts.	6. SCOTLAND, WEST	62	31	53·4	41·1	46·9	2 below	38	−18	3	0	406	− 21	317	− 91
	7. ENGLAND, N.W.	58	30	51·6	41·7	46·4	4 below	32	−27	1	− 1	474*	+ 28	259	−126
	8. ENGLAND, S.W.	61	32	54·4	42·8	48·3	3 below	44	−21	0	− 1	628	+ 60	162	−136
	9. IRELAND, NORTH	57	34	52·0	42·8	47·2	2 below	36	−21	0	− 2	448	− 53	286	− 58
	10. IRELAND, SOUTH	61	38	54·6	44·1	49·0	2 below	49	−16	0	− 1	637	+ 11	183	− 65
	— CHANNEL ISLANDS	59	43	55·4	47·0	50·9	1 below	62	−11	0	0	790	+ 96	49	− 68

Rainfall.

	DISTRICTS. (See p. 110.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	14	8 more	102	+20	29·6	+12·4
	1. SCOTLAND, EAST	5	5	0 (average)	87	+18	15·4	+ 5·5
	2. ENGLAND, N.E.	4	4	0 (average)	73	+ 8	8·9	+ 1·2
	3. ENGLAND, EAST	3	7	3 more	65	− 2	*7·8	+ 0·5
	4. MIDLAND COUNTIES	4	5	0 (average)	72	+ 9	11·9	+ 3·2
	5. ENGLAND, SOUTH	3	3	1 less	75	+13	11·1	+ 2·1
Principal Grazing Districts.	6. SCOTLAND, WEST	5	12	6 more	98	+26	26·5	+ 9·7
	7. ENGLAND, N.W.	6	4	0 (average)	89	+21	15·5	+ 5·2
	8. ENGLAND, S.W.	5	7	2 more	86	+16	17·2	+ 4·2
	9. IRELAND, NORTH	7	12	6 more	104	+22	17·9	+ 6·5
	10. IRELAND, SOUTH	6	7	1 more	96	+21	19·2	+ 5·3
	— CHANNEL ISLANDS	4	3	1 less	89	+15	11·9	+ 1·1

Bright Sunshine.

	DISTRICTS. (See p. 110.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	30	− 8	27	− 7	301	−101	20	− 7
	1. SCOTLAND, EAST	31	− 9	28	− 8	342	−103	25	− 7
	2. ENGLAND, N.E.	25	−10	22	− 9	374	− 81	25	− 5
	3. ENGLAND, EAST	23	−23	22	−21	462	− 51	30	− 3
	4. MIDLAND COUNTIES	16	−26	15	−24	375	− 66	25	− 4
	5. ENGLAND, SOUTH	22	−26	21	−24	460	− 53	30	− 4
Principal Grazing Districts.	6. SCOTLAND, WEST	24	−19	22	−17	344	−113	23	− 8
	7. ENGLAND, N.W.	21	−21	20	−19	394	− 57	26	− 4
	8. ENGLAND, S.W.	26	−20	24	−19	445	− 93	29	− 6
	9. IRELAND, NORTH	19	−23	17	−20	329	−119	22	− 8
	10. IRELAND, SOUTH	23	−22	21	−21	383	−124	25	− 8
	— CHANNEL ISLANDS	43	−12	41	−11	565	− 47	37	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather continued in a very unsettled condition generally, but the rain was less heavy than in the two preceding weeks, and the only thunder and lightning experienced occurred at some southern and south-eastern stations on the 10th.

Temperature was below the mean, the deficit ranging from 1° in the Channel Islands, to 3° over the greater part of England and in Scotland N., and to 4° in England N.W. The highest of the maxima were reported, as a rule, during the latter days of the period, and ranged from 63° in England N.E. and E. to 57° in Scotland N. and Ireland N. At many north-eastern and north-western stations the maxima during the earlier half of the week were below 50°. The lowest of the minima, which were recorded between the 11th and 13th, were again low for the time of year. Over Great Britain they ranged between 29° and 32°, but in Ireland N. and S. the lowest readings were 34° and 38° respectively, while in the Channel Islands the thermometer did not fall below 40°. At Bawtry the readings on the nights of the 12th and 13th were as low as 29°, while on the following night the minimum was 21° higher.

Rainfall exceeded the mean in Ireland, Scotland N. and W., and in England E. and S.W., but only just equalled it in most other parts of the Kingdom, and in England S. and in the Channel Islands was less than the normal.

Bright Sunshine was again very deficient throughout the Kingdom. The percentage of the possible duration ranged from 41 in the Channel Islands to 28 in Scotland E., 17 in Ireland N. and to 15 in the Midland Counties.

Barometer and Wind. At the commencement of the week the barometer was highest off our extreme north-west coasts, while a band of low pressure with more than one minimum, extended east-north-eastwards and eastwards from the Bay of Biscay over England to central Europe. The high pressure subsequently moved slowly southwards over Ireland, south-eastwards to the Bay of Biscay, and finally stretched across France to eastern Europe, the low pressure area becoming in the meantime much modified in form and travelling away eastwards. With this change in the distribution, large depressions began to move east-north-eastwards outside our north-western and northern coasts, and their secondaries in a similar direction directly over the Kingdom. The wind, which was at first mainly from between North-West and North-East gradually backed to the Westward or South-Westward and occasionally blew freshly or strongly over our western and northern coasts, and at the end of the period over our more southern districts also.

207 | 90 Wy. & S. Ltd.
319 | 70 1903

II.—DATA from which the SUMMARY on page 109 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
C. SCOTLAND, N.	Sumburgh Head	50	34	47·7	38·0	42·6	− 1·9	21	11	6	0·82	+ 0·40	*	*	*	*
	Stornoway	53	30	50·0	36·7	43·0	− 3·4	29	15	6	0·91	+ 0·35	38·6	− 3·6	34	− 3
	Wick	54	34	49·0	38·3	43·3	− 3·4	25	10	5	0·19	− 0·21	*	*	*	*
	Lairg Ⓢ	57	32	52·2	36·9	44·1	− 1·7	36	14	6	0·81	+ 0·32	*	*	*	*
	Glencarron Ⓢ	51	33	48·2	37·4	42·5	− 4·5	23	13	6	2·46	+ 1·42	*	*	*	*
	Fort Augustus Ⓢ	55	32	51·0	38·5	44·4	− 4·0	32	10	4	1·73	+ 1·26	17·6	− 12·2	16	− 11
	Fort William	53	33	50·2	39·5	44·5	− 4·5	28	7	5	2·99	+ 2·20	13·7	− 25·5	12	− 23
1. SCOTLAND, E.	Nairn	57	34	53·9	39·0	46·0	− 2·2	41	8	7	0·59	+ 0·23	*	*	*	*
	Aberdeen	62	33	53·3	40 0	46·3	− 1·1	39	6	6	0·51	+ 0·06	39·6	− 2·9	35	− 3
	Braemar Ⓢ	53	29	48·7	36·6	42·3	− 2·6	25	15	5	0·29	− 0·21	*	*	*	*
	Ochtertyre Ⓢ	58	33	55·4	39·9	47·2	− 1·8	45	6	4	0·58	+ 0·04	*	*	*	*
	Leith	58	37	54·1	43·0	48·2	− 0·9	43	0	3	0·16	− 0·21	*	*	*	*
	Marchmont Ⓢ	57	35	50·4	39·0	44·4	− 2·7	29	8	4	0·54	+ 0·01	26·5	− 14·5	24	− 13
2. ENGLAND, N.E.	Alnwick Castle	57	33	51·8	41·2	46·2	− 0·9	33	2	5	0·29	− 0·17	*	*	*	*
	Durham	58	29	50·5	38·9	44·4	− 3·6	30	9	3	0·42	− 0·02	29·6	− 8·7	27	− 8
	Shields	62	35	53·3	42·3	47·5	− 0·2	39	0	4	0·41	+ 0·05	*	*	*	*
	Scarborough Ⓜ	60	33	53·8	39·1	46·0	− 2·5	40	8	2	0·95	+ 0·51	27·2	—	25	—
	Spurn Head	63	38	53·3	43·3	48·0	− 0·9	42	0	4	0·17	− 0·18	*	*	*	*
	Fulbeck (Lincolnshire)	61	32	54·5	40·7	47·2	− 2·8	42	4	5	0·33	− 0·09	22·8	—	21	—
3. ENGLAND, E.	Hillington Ⓜ	62	35	56·4	40·8	48·1	− 1·9	48	3	4	0·37	− 0·03	25·7	− 20·3	24	− 19
	Yarmouth	62	36	55·0	42·1	48·2	− 1·0	43	0	3	0·48	+ 0·08	*	*	*	*
	Geldeston	62	31	56·3	41·5	48·5	− 1·3	48	1	3	0·78	+ 0·39	19·6	− 29·7	18	− 21
	Cambridge	63	32	56·9	40·8	48·4	− 2·7	50	3	4	0·75	+ 0·35	24·9	− 20·1	23	− 19
	Felixstowe	60	35	55·2	42·7	48·6	− 0·5	46	0	3	1·19	—	25·7†	—	24†	—
	Rothamsted	60	31	54·8	40·8	47·4	− 2·5	43	3	4	0·58	+ 0·13	21·2†	− 22·5	20	− 21
	Shoeburyness	58	37	55·7	42·7	48·8	− 0·5	48	0	2	0·87	+ 0·54	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	57	31	51·6	39·7	45·3	− 2·6	33	6	6	0·47	+ 0·04	17·4	—	16	—
	Bawtry (Hesley Hall)	62	29	55·9	39·9	47·4	− 2·6	47	6	4	0·18	− 0·26	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	61	35	55·1	41·6	48·0	− 2·6	44	1	4	0·57	+ 0·13	*	*	*	*
	Cheadle Ⓜ	57	35	51·4	39·8	45.3	− 3·4	32	6	4	0·75	+ 0·25	*	*	*	*
	Birmingham (Edgbaston)	57	36	51·5	41·3	46·1	− 3·6	32	2	4	0·49	− 0·01	10·3	—	10	—
	Churchstoke Ⓜ	60	32	52·8	39·9	46·0	− 2·7	37	6	4	0·43	− 0·03	26·0	− 17·2	24	− 16
	Hereford Ⓜ	60	37	54·3	41·8	47·7	− 3·3	41	1	4	0·58	+ 0·12	*	*	*	*
	Cirencester	59	31	53·0	39·0	45·6	− 4·1	38	8	5	0·42	− 0·05	10·1	− 35·2	10	− 33
	Oxford	59	38	54·0	43·0	48·2	− 2·9	43	6	4	0·41	+ 0·01	11·0	− 32·4	10	− 30
5 ENGLAND, S.	London	60	34	57·0	43·0	49·6	− 2·9	53	0	3	0·58	+ 0·20	17·9‡	− 22·3‡	17‡	− 21‡
	Swarraton (Alresford) Ⓜ	59	31	53·8	39·7	46·3	− 3·2	40	6	5	0·30	− 0·14	*	*	*	*
	Dungeness	60	36	55·3	42·7	48·6	− 2·4	46	0	3	0·18	− 0·12	30·2	—	28	—
	Hastings (St. Leonards)	56	39	54·0	43·8	48·6	− 2·5	46	0	2	0·34	− 0·03	40·8	− 11·2	38	− 11
	Southampton	60	38	57·1	43·3	49·8	− 2·6	55	0	4	0·38	− 0·02	15·0	− 33·4	14	− 31
	Portland Bill	55	40	53·6	45.1	49·1	− 2·1	50	0	3	0·11	—	*	*	*	*
	Shaftesbury Ⓜ	58	37	52·4	41·1	46·4	− 3·5	35	3	3	0·41	− 0·07	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	55	31	52·1	40·7	46.1	− 3·3	34	4	5	2·23	+ 1·39	*	*	*	*
	Glasgow	55	34	51·5	41·2	46·0	− 2·9	31	2	4	1·08	+ 0·54	20·8	− 16·0	19	− 15
	Cally Ⓢ	62	32	59·1	39·8	48·9	− 0·2	58	6	6	1·27	+ 0·63	*	*	*	*
	Aspatria	55	34	51·4	40·4	45·6	− 2·9	32	4	5	0·72	—	22·2	—	20	—
	Douglas (Isle of Man)	56	36	52·7	43·6	47·9	− 1·2	41	0	7	0·66	+ 0·16	28·9	− 21·6	26	− 20
7. ENGLAND, N.W	Newton Reigny	54	30	49·7	38·5	43·8	− 3·6	27	10	6	0·34	—	13·5	—	12	—
	Stonyhurst	58	33	51·4	41·1	45·9	− 3·4	31	3	6	0·66	+ 0·06	23·2	− 20·1	21	− 18
	Blackpool Ⓜ	54	34	51·9	42·9	47·1	− 3·0	36	0	6	0·27	− 0·19	22·0	− 21·9	20	− 20
	Manchester (Prestwich)	56	34	51·3	40·7	45·7	− 3·6	31	4	6	0·68	+ 0·16	11·8	—	11	—
	Liverpool Obsy. (Bidston)	58	37	52·1	42·6	47·1	− 3·6	36	0	6	0·32	− 0·10	22·1	—	20	—
	Chester (Hawarden Bridge)	58	36	53·6	42·1	47·5	− 3·8	39	0	3	0·41	—	*	*	*	*
	Llandudno Ⓜ	55	34	52·0	42·5	47·0	− 3·7	35	0	6	0·26	− 0·14	21·5	− 19·4	23	− 18
	Holyhead	55	37	51·0	43·0	46·8	− 3·6	34	0	5	0·50	+ 0·09	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	54	40	51·9	45·6	48·6	− 1·2	46	0	3	0·46	+ 0·02	24·4	− 25·6	23	− 24
	Clifton	60	38	54·8	44·0	49·1	− 1·8	50	0	5	0·87	+ 0·35	*	*	*	*
	Bath	60	32	55·3	41·6	48·0	− 3·2	44	1	4	0·71	+ 0·25	12·0	—	11	—
	Arlington (N. Devon)	56	37	52·4	40·0	45·8	− 3·7	35	6	7	1·57	+ 0·94	*	*	*	*
	Cullompton Ⓜ	61	35	50·7	42·3	49·1	− 2·2	50	0	6	0·55	+ 0·08	20·4	− 24·0	19	− 23
	Falmouth	58	41	54·5	44·2	49·0	− 2·3	49	0	4	0·23	− 0·34	31·8	− 19·9	30	− 19
	Plymouth	58	38	55·5	42·1	48·4	− 4·0	45	0	5	0·26	− 0·19	27·1	− 21·2	26	− 20
9. IRELAND, N.	Malin Head	53	39	49·7	42·7	46·0	− 3·1	28	0	7	0·78	+ 0·31	*	*	*	*
	Edenfel (Omagh)	54	35	52·3	41·3	46·5	− 2·2	34	2	7	1·10	+ 0·55	*	*	*	*
	Blacksod Point	53	41	51·4	45·3	48·2	− 2·1	43	0	7	1·48	+ 0·85	*	*	*	*
	Markree Castle	56	34	52·8	42·6	47·4	− 1·7	38	0	7	0·92	+ 0·36	23·7	− 18·1	22	− 17
	Armagh	56	36	53·4	42·2	47·5	− 1·9	39	0	7	1·31	+ 0·84	13·8	− 27·0	13	− 25
	Donaghadee	57	40	52·4	42·9	47·4	− 2·1	38	0	6	1·30	+ 0·82	*	*	*	*
10. IRELAND, S.	Dublin	61	41	55·1	44·6	49·5	− 1·8	53	0	6	0·67	+ 0·23	23·6	− 23·6	22	− 22
	Birr Castle	58	38	54·4	41·9	47·8	− 2·4	41	0	7	0·85	+ 0·35	23·3	− 18·1	21	− 17
	Kilkenny	59	40	53·6	43·3	48·1	− 2·6	43	0	4	0·60	+ 0·12	*	*	*	*
	Waterford	58	40	54·6	43·4	48·7	− 1·8	47	0	5	0·37	− 0·15	*	*	*	*
	Roche's Point	58	43	55·1	45·3	49·9	− 1·8	55	0	5	0·50	− 0·15	*	*	*	*
	Valencia	57	41	54·0	45·4	49·4	− 2·2	52	0	7	0·83	+ 0·15	22·2	− 25·1	21	− 23
	Killarney	57	40	55·5	44·9	49.9	− 1·1	55	0	5	0·90	+ 0·20	*	*	*	*
	Foynes	56	39	54·1	43·8	48·6	− 2·0	46	0	6	0·85	+ 0·32	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	44	54·7	47·6	50·9	− 0·9	62	0	3	0·25	− 0·14	44·5	− 8·3	42	− 8
	Jersey	59	40	56·0	46·3	50.9	− 1·8	62	0	4	0·32	− 0·11	44·9	− 10·1	43	− 9

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

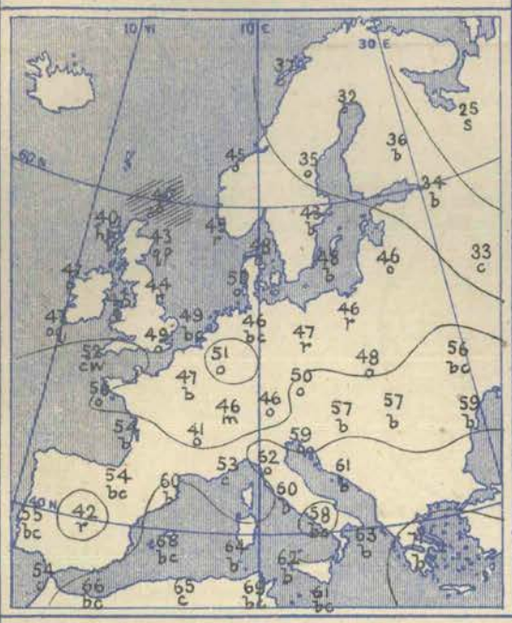
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

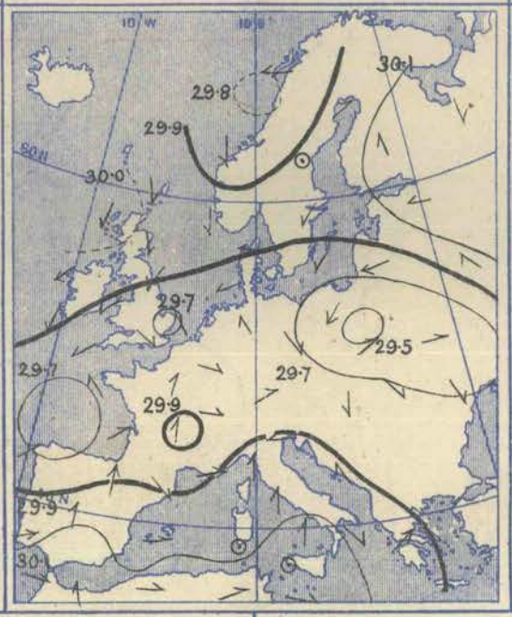
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 10th May, 1903.

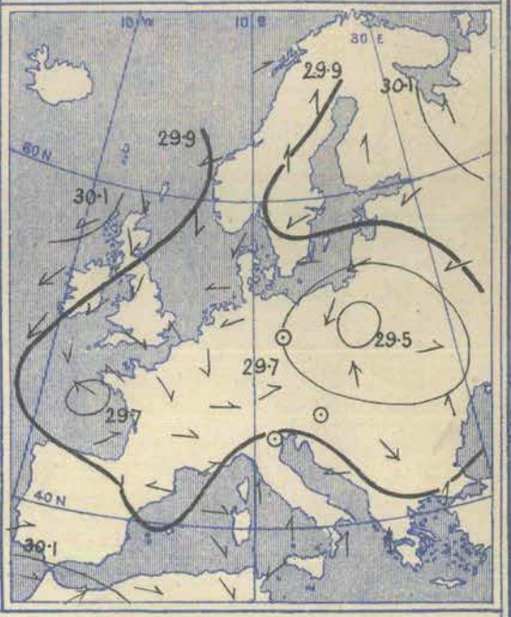
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in the morning fine and bright over the Gulf of Finland, the south of Sweden, Hungary, southern Russia, and on many shores of the Mediterranean, but cloudy or overcast as a whole, with rain at Madrid, in several parts of our Islands and Germany, and snow at Archangel. Rain falling generally later except over the most southern and eastern regions—largest amounts, 0·7 in. at Warsaw, 1·0 in. at Vienna, and 1·1 ins. at Münster. Thunder occurring at Dungeness and Clacton.

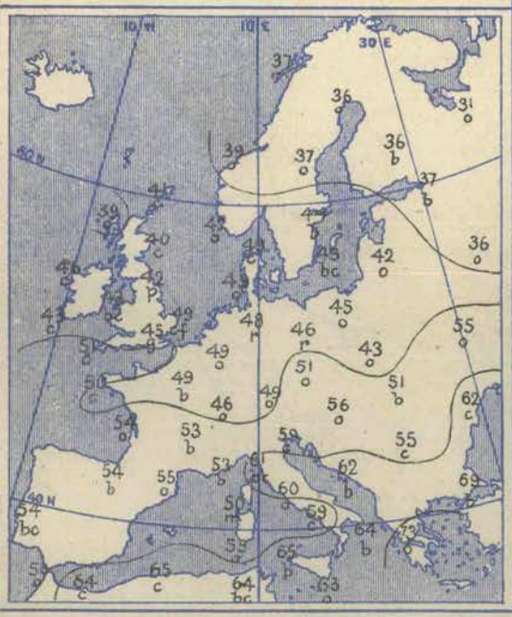
Temperature changed irregularly. Readings at 8 a.m. highest, 71° in Greece, 69° at Tunis, 66° at Palma and Alicante, 62° at Leghorn and Nicolaïeff. Lowest, 25° at Archangel, 32° at Haparanda, 33° at Moscow, 41° at Sumburgh Head and Lyons, and 42° at Madrid. Rising during day to 57° in London, to above 60° over France and the south of Germany, and to above 70° over southern Europe and Algeria. Highest readings, 82° at Tunis and 86° at Athens. Remaining below 50° over north Germany and at most of our own stations.

Wind in morning varying greatly. Several cyclonic circulations shown, the two chief being around the Bay of Biscay and the north of Poland. Not much force as a whole, but Westerly to Southerly winds strong or fresh over the Spanish Peninsula, and the North-Easterly current strong over the Baltic. No general change later, but force of wind decreasing over the Peninsula.

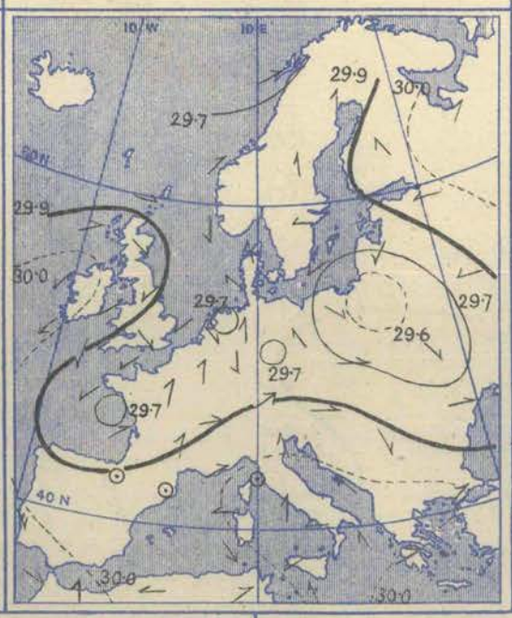
Barometer at 8 a.m. ranging from 30·1 ins. and above over the north of Russia and the southern and south-western parts of our area, and from 30·09 ins. in the Hebrides to about 29·8 ins. in a shallow depression over the north of Norway, to 29·7 ins. and less (1) in another and more important system over the Bay of Biscay, and (2) in a small minimum over the east of England; and to 29·5 ins. in an elongated disturbance stretching from East Prussia to Little Russia. Norwegian depression disappearing by evening and the others becoming much modified in shape.

Monday, 11th May, 1903.

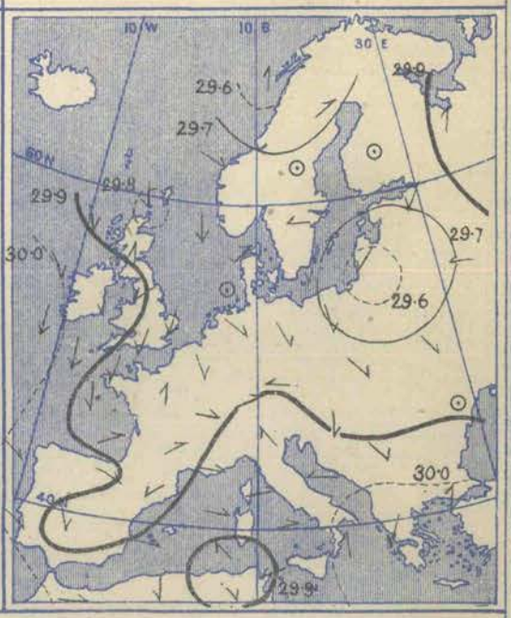
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull as a whole, but bright in a few isolated localities. Rain falling at some stations in England, north Germany, and Brittany, and also at the Helder. Rain falling later in most parts of our Islands and over the greater part of western Europe, and thunderstorms experienced at Jersey, and at several French stations. Rainfall at Lyons as much as 2·13 ins.

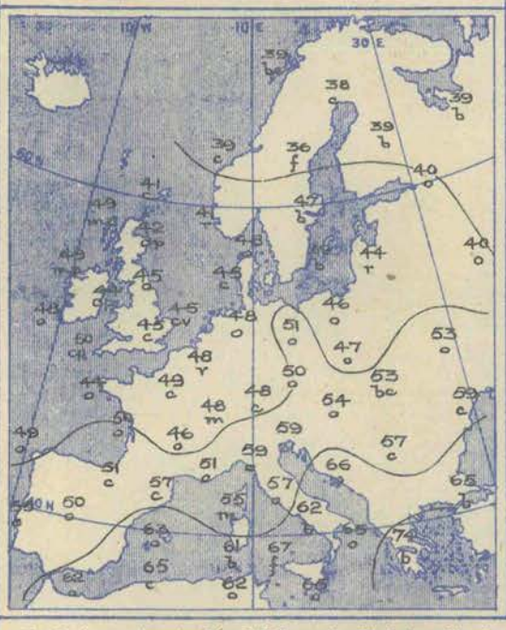
Temperature showing no general change. Morning readings ranging from 31° at Archangel, 36° at Moscow, Kuopio and Haparanda, 39° at Stornoway, and 41° at Oxford, to above 50° in Austria-Hungary, above 60° in most parts of Italy, Algeria, and on the northern shores of the Black Sea, and to 73° at Athens. Continuing below 50° all day at many of our own stations, but rising to 60° at Dungeness, to above that value in most parts of France, and to above 70° at most southern stations. Highest readings, 82° at Constantinople and Patras, and 86° at Tunis.

Wind at 8 a.m. divided into several cyclonic circulations and mainly of very little force. Light and very variable over the Mediterranean and its neighbourhood, and Northerly and North-Easterly over our Islands. No general or important change taking place during day.

Barometer risen slowly except over northern Europe. Morning readings ranging from above 30·0 ins. over the north of Russia, Ireland, the south-west of Spain and Italy, and its neighbourhood to 29·7 ins. or less (1) over the north of Norway, and (2) in three other minima lying respectively over the Bay of Biscay, the north of Holland, and north Germany, and to below 29·6 ins. over East Prussia, and the adjoining portion of Russia. Some of the smaller minima disappearing by evening, but another appearing over the Shetlands.

Tuesday, 12th May, 1903.

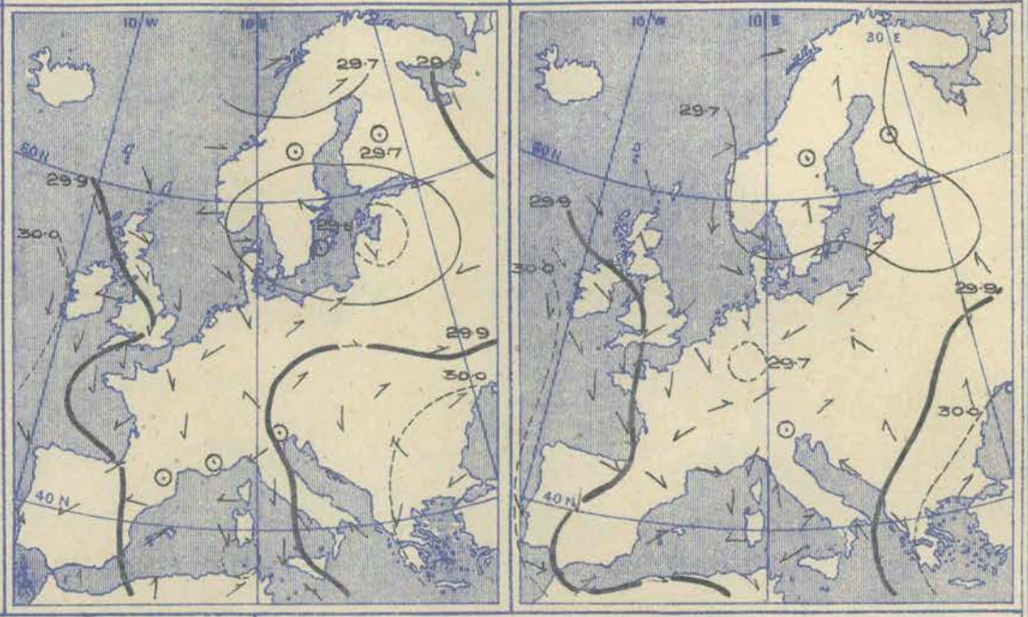
Temperature and Weather. 8 a.m.



Weather in morning cloudy or dull in nearly all places, with showers in different parts of our Islands and rain at Turin, in Belgium, at Memel, and Riga. Rain falling later at most of our own western and northern stations, as well as over France and most parts of central and northern Europe. Heaviest amounts, 0·55 in. at Biarritz, and 2·48 ins. at Lyons.

Temperature risen a little in most regions. Morning readings ranging from 74° at Athens, 67° at Palermo, 66° at Lésina, and 65° at Algiers and Constantinople, to about 50° over the greater part of Europe, and to 40° or rather lower in the higher latitudes. Rising subsequently to 56° at Roche's Point, to 60° or a little above at several French and German stations, to 70° or above over Italy, Algeria, and the south of Austria, to 84° at Athens, and to 87° at Constantinople. Remaining below 50° on some parts of our north and east coasts.

Barometer and Wind. 8 a.m. and 6 p.m.

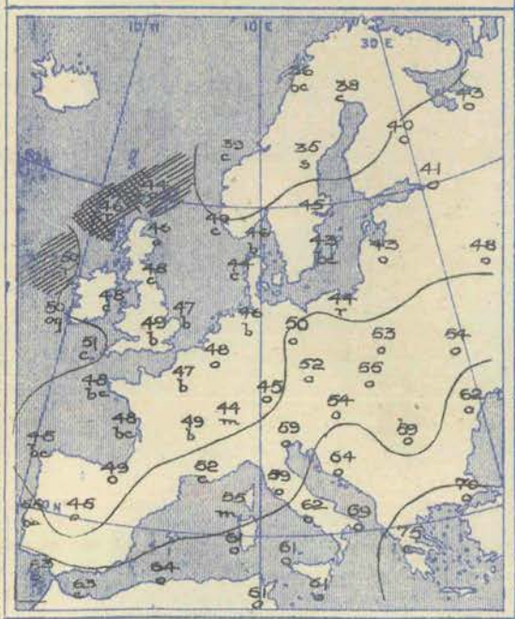


Wind at 8 a.m. light or moderate from the Northward over the United Kingdom and France, and from the South-Eastward over the south-west of Germany. Two complete cyclonic circulations shown, one around the Gulf of Bothnia, and the other over the Mediterranean. No general change later, but South-Easterly breezes appearing in the east and north-east of Scotland.

Barometer fallen in most regions, but risen over Germany, Austria-Hungary, and the south of Russia, as well as in the south of England and north-west of France. Morning readings ranging from above 30·0 ins. over the extreme south-east of our area, and also off the west of Ireland, to 29·8 ins. and less between Sardinia and Tunis, 29·7 ins. and less over Lapland, and to below 29·6 ins. over the Gulf of Riga and its vicinity. Changing little and irregularly during day, and no modification taking place in the general distribution of pressure.

Wednesday, 13th May, 1903.

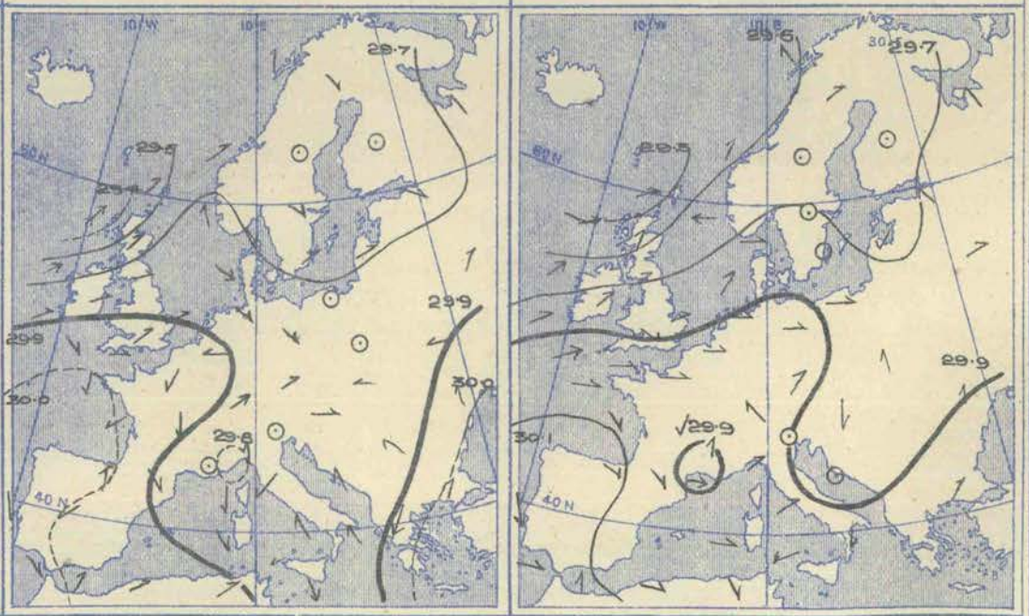
Temperature and Weather. 8 a.m.



Weather in morning fine and bright in Portugal, the south of England, and the north of France, but cloudy or overcast over Europe as a whole. Rain falling in Ireland, the Hebrides, at Neu-Fahrwasser, Bilbao, and Pesaro, and snow at Hernösand. Fog prevailing at Corunna. Rain later at most of our northern and north-western stations, in the south of Norway, at some German and most Austria-Hungarian stations, as well as in some parts of Italy and Algeria. Largest amount, 0·47 in. at Trieste.

Temperature changed irregularly. Morning readings highest, 75° at Patras, 70° at Constantinople, 69° at Brindisi, 66° at Palma, 64° at Nicolaieff, and 63° at Oran and San Fernando. Lowest, 34° at Bodö, 35° at Hernösand, 40° at Karlstad, 44° at Wick, Copenhagen, and Belfort, and 45° at Corunna and Madrid. Rising subsequently to 59° at Jersey and in London, to above 60° in most parts of France and central Europe, above 70° over Italy, the Adriatic, and Algeria, and to above 80° in Greece and Constantinople. Highest value, 86° at Athens.

Barometer and Wind. 8 a.m. and 6 p.m.



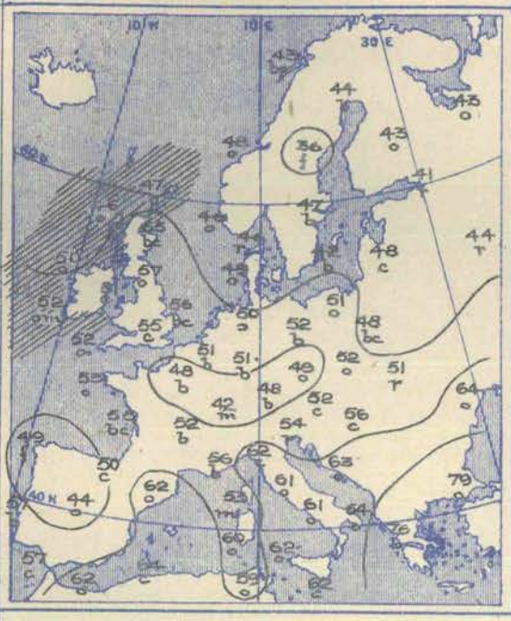
Wind light and variable over our area as a whole, but South-Westerly over the United Kingdom, and strong in force on our extreme western and north-western coasts, with a fresh gale in the Hebrides. Gale subsiding during day and wind veering towards West and decreasing somewhat in force on our western and northern coasts generally.

Barometer fallen generally—very briskly over our own northern and north-western districts—but risen over France, Algeria, and the Iberian Peninsula. Readings at 8 a.m. ranging from 30·0 ins. and upwards both in the extreme south-east and south-west of our area to 29·8 ins. or less in two small minima lying respectively over the Gulf of Genoa and near Rome, and to below 29·4 ins. in a rather important disturbance off the north-west of Scotland. Depression moving north-eastwards during day and pressure increasing steadily over southern and central Europe.

Thursday, 14th May, 1903.

Temperature and Weather.

8 a.m.

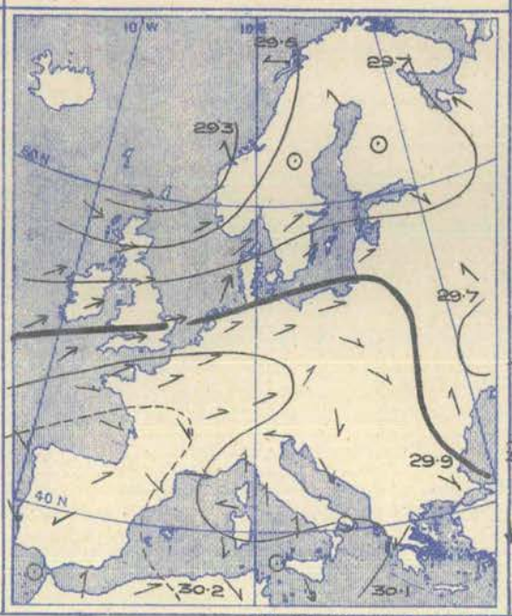


Weather at 8. a.m. cloudy or dull as a whole, but fair in some parts of Scotland, the south-east of Sweden, and at many French and Portuguese stations. Rainy at Ulsaborg, St. Petersburg, Moscow, Skagen, and Karlstad, and showery at Leith; fog still prevailing at Corunna. Rain experienced later on our western and northern coasts, in the north of Italy, and in various parts of Scandinavia and Russia; amounts small generally, but 0·5 in. recorded at Donaghadee.

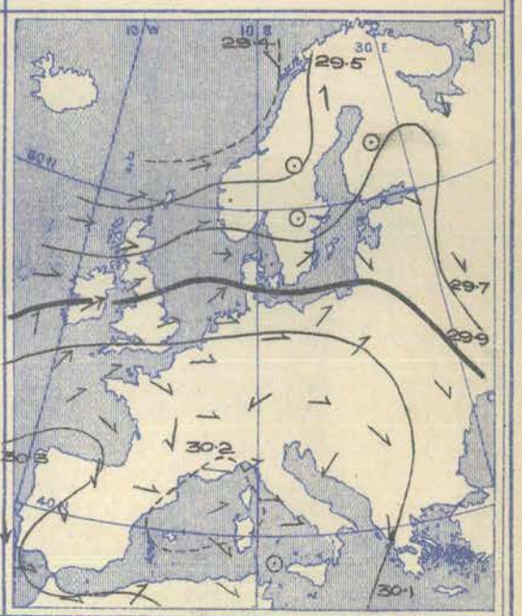
Temperature risen in most places. Morning readings ranging from 79° at Constantinople, 76° at Patras, and 64° at Brindisi and Algiers, to 44° at Madrid, Haparanda, and Moscow, and to 36° at Hernösand. Above 50° at almost all our own stations. Maxima exceeding 60° along our north-east coast during day, as well as in most parts of Germany and France; touching or exceeding 70° at many Italian and Algerian stations, and rising to 86° in Greece.

Barometer and Wind.

8 a.m.



6 p.m.



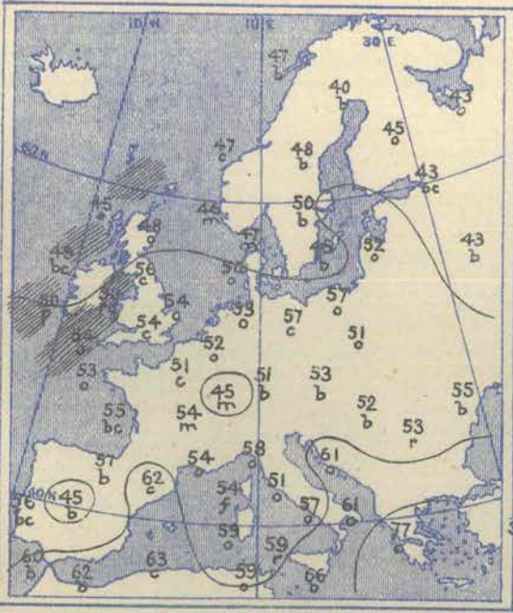
Wind South-Westerly or Westerly (fresh or strong) over the United Kingdom and France; South-Westerly to Southerly (moderate) on the southern and eastern shores of the North Sea, and South-Easterly or Easterly in the north of Scandinavia. Light and variable over Italy and its neighbourhood, and light and cyclonic over the southern half of Russia. Very little change as a whole later, but wind becoming more Westerly to the eastward of the North Sea, and backing to South at Valencia Island.

Barometer risen in most regions, but fallen over Norway and the more southern parts of Russia. Readings at 8 a.m. highest, 30·2 ins. and upwards, in an anticyclone extending from the Iberian Peninsula to central France. Lowest, 29·3 ins. and less, in a large depression with its centre off the west of Norway. Below 29·7 ins. in a large shallow disturbance over the southern part of central Russia. Northern cyclonic system travelling North-Eastwards during day and barometer rising except over the extreme north of Europe, but upward movement slackening by 6 p.m. in the south-west of Ireland. Russian depression passing away eastwards.

Friday, 15th May, 1903.

Temperature and Weather.

8 a.m.

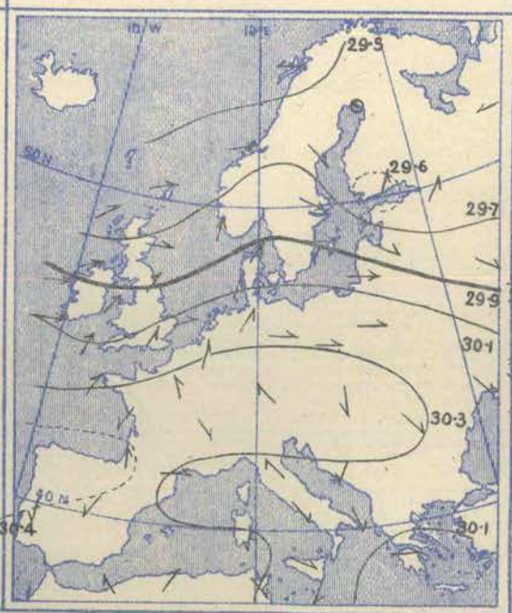


Weather in morning cloudy or dull over the greater portion of our area, but fine and bright in Sweden, the southern parts of central Europe, the Spanish Peninsula and the south-west of France. Rainy at Hermanstadt and Palermo, and showery in our own western districts. Rain falling at nearly all our own stations later, as well as over Brittany, the Riviera and northern Italy, and in different parts of Russia and Scandinavia.

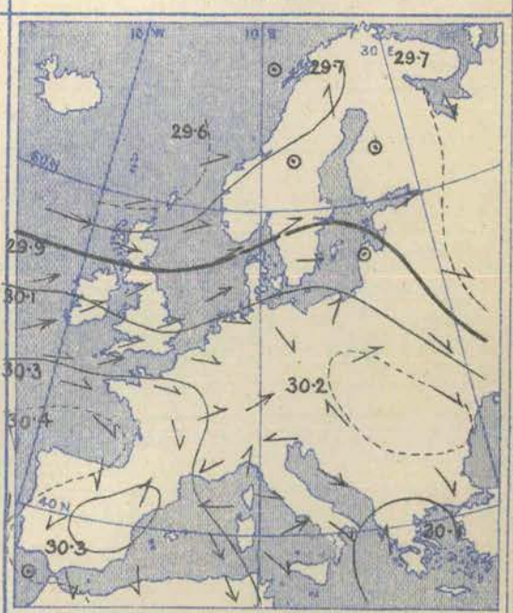
Temperature changed little as a whole, but fallen in Italy and the south of Russia. Morning readings highest, 77° at Athens, 66° at Malta, 63° at Algiers, 62° at Barcelona, and 61° at Brindisi. Lowest, 40° at Haparanda, 43° at Archangel, St. Petersburg, and Moscow, 45° at Wisby, Wick, and Madrid, and 48° at Le Mans and Limoges. Rising subsequently to 60° in London, to 61° at Hernösand and Stockholm, to several degrees higher over France, Germany, and central Europe, to above 70° over Italy and Spain, and to above 80° in Greece.

Barometer and Wind.

8 a.m.



6 p.m.

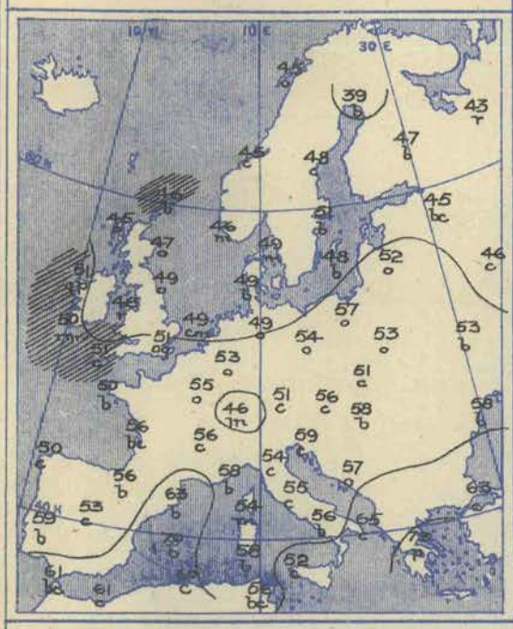


Wind Westerly to South-Westerly over the northern half of our area generally, but Easterly at Archangel and Bodö. Variable in most southern regions. Light or moderate in force as a whole, but fresh or strong on our own western coasts. No decided change in direction during day, but force increasing in Scotland and the north of Ireland.

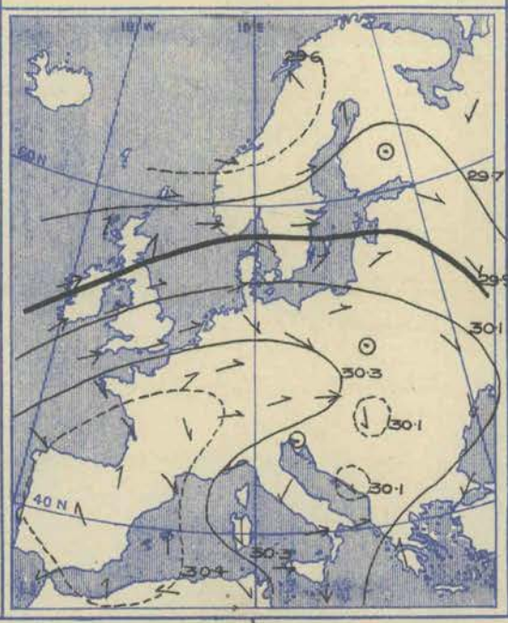
Barometer risen except in Finland and northern Russia. Readings at 8 a.m. ranging from 30·4 ins. and upwards to 30·3 ins. in a large anticyclonic area extending from the Atlantic eastwards across central Europe to Transylvania, to below 30·1 ins. over Greece, below 29·6 ins. in a small shallow disturbance over Finland, and to less than 29·5 ins. in a larger system off the north-west of Norway. Pressure increasing in most regions later, but decreasing over central Europe as well at in the Netherlands and Shetlands. A small secondary disturbance passing eastwards over England.

Saturday, 16th May, 1903.

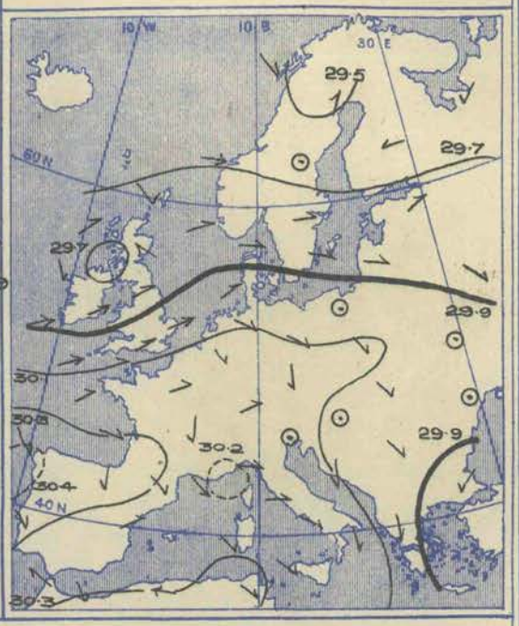
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull as a whole, but fine and bright in many parts of Russia and Sweden, over Portugal, and in some localities on the shores of the Mediterranean. Showery over our most western districts and rainy at Archangel and Prague. Rain falling later throughout the United Kingdom, the north of France, the Netherlands, Germany, as well as in many parts of Austria, Finland, and Scandinavia. Heaviest falls, 0·62 in. at Donaghadee and 0·44 in. at Nairn.

Temperature changes slight, but generally upward except over our Islands, Germany and Greece. Morning readings ranging from 73° at Athens, 70° at Palma, 65° at Brindisi, and 63° at Constantinople and Barcelona to a little below 50° over the major portions of the United Kingdom and Scandinavia, and to 39° at Haparanda. As low as 54° at Tunis and 46° at Belfort. Rising during day to 82° at Athens and to 70° or some degrees higher in most southern regions, and also at Buda-Pesth. Remaining below 60° over the greater part of our Islands, but just touching that figure in London.

Wind South-Westerly to Westerly over the northern half of Europe, but drawing into South-East or East in the extreme north. Light and anticyclonic over the south-western parts of our area. Strong on our own western coasts and Skudesnaes, and a moderate gale (from north) prevailing at Malta. A complete cyclonic circulation setting in over our Islands later, the South-Westerly to Westerly winds on our south-west and west coasts and the Northerly current in the north-west blowing very strongly.

Barometer risen in most places, but fallen over central Europe, Italy, the south of Russia, and also on the west coast of Ireland. Highest at 8 a.m., 30·4 ins. and upwards, in an anticyclone covering the Iberian Peninsula, and extending northwards to Paris and eastwards to Algiers; lowest, 29·6 ins. and less in a large disturbance having its centre off the north-west coast of Norway. The centre of a well-formed depression appearing over the south-west of Scotland by evening and subsequently moving east-south-eastwards. Northern disturbance moving eastwards to the north of Sweden.

IV.—GENERAL NOTES, etc.

The distribution of pressure over our Islands and Continental Europe was very irregular. This was especially the case during the earlier half of the period, when a long band of relatively low pressure with several distinct minima at first extended from the Bay of Biscay to the south of Russia, subsequently undergoing such changes in form and position until it stretched southwards from the north of Scandinavia to the south of Italy, and finally travelled away eastwards. During the latter part of the week the barometer was generally highest over the south-western and southern or central countries, while some large cyclonic disturbances moved east-north-eastwards over the northern portion of our area. The winds were at first light or moderate in force, and very variable in direction, but with the establishment of the less complex type of pressure distribution, they became South-Westerly or Westerly over the northern regions, and increased considerably in force. Over the Mediterranean and most southern districts, the wind, although occasionally chiefly from some Easterly point, continued rather variable and of little strength. Temperature was rather low except over the most southern and south-eastern countries, where it appears to have differed but little from the normal for the time of year. Falls of rain were very general during the early days of the week, but afterwards they were mostly confined to our Islands, Scandinavia, Finland, and different parts of Russia. The amounts were not, as a rule, large, but on the 11th and also on the following day more than two inches were reported at Lyons. In Greece, where the highest temperatures were experienced, the weather was dry and almost continuously bright.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 110.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	48·5	+ 8·3	42	+ 7
STRATHPEFFER SPA	32·1	- 6·6	28	- 6
EDINBURGH	28·0	- 9·3	25	- 8
COCKLE PARK	18·4	—	17	—
NEWCASTLE-ON-TYNE	20·6	—	19	—
YORK	—	—	—	—
CROMER	27·6	—	26	—
LOWESTOFT	25·6	—	24	—
HOLLESLEY BAY	22·9	—	21	—
DUNMOW	21·0	—	19	—
SHEFFIELD	18·6	—	17	—
WORKSOP	18·7	- 19·5	17	- 18
THURCASTON	15·8	- 24·6	15	- 23
TUNBRIDGE WELLS	23·7	—	22	—
MARGATE	19·0	- 24·6	18	- 23
BROADSTAIRS	24·6	—	23	—
RAMSGATE	—	—	—	—
EASTBOURNE	35.7	- 14·5	33	- 14
BRIGHTON	27·3	- 21·2	26	- 20
WORTHING	29·4	—	28	—
BOGNOR	33·5†	—	31†	—
WATERGATE PARK	15·7	—	15	—
WESTBOURNE	24·7†	- 25·6	23†	- 24
VENTNOR HOSPITAL	—	—	—	—
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	10·5	- 30·8	10	- 29
SOUTHPORT	26·2	—	24	—
RHYL	27·6	—	25	—
ABERDOVEY	31·3†	—	29†	—
TENBY	—	—	—	—
TORQUAY	32·6	- 16·9	31	- 16
NEWQUAY	40·2	- 8·4	38	- 8
GUERNSEY	40·9†	- 16·6	39†	- 16

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day-Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX. No. 14 p. 84	Bognor	—	—	—	—	—	—	—	—	—	—	—	50·6	—	54	—
" " " 15 p. 90	"	—	—	—	—	—	—	—	—	—	—	—	57·6	—	60	—
" " " 16 p. 92	Glasgow	—	—	—	33·0	40·9	- 4·3	—	37	—	—	—	—	—	—	—
" " " 17 p. 98	Durham	55	30	50·3	37·8	43·8	- 2·1	30	12	7	0·90	+0·46	8·0	- 25·3	8	- 24
" " " " "	London	—	—	—	—	—	—	—	—	—	1·47	+1·09	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 20.] *Third Series.* WEEK ENDING SATURDAY, MAY 23RD, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 116.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	67	31	54·0	39·4	46·2	2 below	40	− 8	7	+ 2	312	− 43	483	− 45
	1. SCOTLAND, EAST	68	28	57·3	40·0	48·2	1 below	52	− 5	6	+ 2	397	− 51	499	− 79
	2. ENGLAND, N.E.	76	35	59·4	42·8	50·6	1 above	60	+ 3	0	− 2	509	+ 60	342	−134
	3. ENGLAND, EAST	78	34	61·5	43·7	52·1	1 above	71	− 2	0	− 2	650	+ 76	322*	−200
	4. MIDLAND COUNTIES	79	30	62·7	42·2	51·8	1 above	69	− 6	0	− 3	596	− 9	355	−177
	5. ENGLAND, SOUTH	79	33	62·1	45·2	53·2	1 above	78	− 3	0	− 1	683	+ 31	208	−178
Principal Grazing Districts.	6. SCOTLAND, WEST	63	32	57·2	42·5	49·4	1 below	52	−12	0	− 2	458	− 33	317	− 93
	7. ENGLAND, N.W.	75	34	59·1	44·1	51·2	0 (average)	64	− 4	0	− 1	538	+ 24	259	−127
	8. ENGLAND, S.W.	76	33	60·9	44·3	52·1	0 (average)	71	− 3	0	− 1	699	− 57	162	−137
	9. IRELAND, NORTH	62	34	56·5	43·6	49·7	1 below	54	−11	0	− 1	502	− 64	286	− 59
	10. IRELAND, SOUTH	68	34	58·2	43·9	50·6	2 below	60	−13	0	− 1	697	− 2	183	− 66
	— CHANNEL ISLANDS	72	45	60·9	49·0	54·6	1 above	88	+ 6	0	0	878	+102	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 116.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	6	0 (average)	106	+20	30·2	+12·4	37	− 2	32	− 1	338	−103	21	− 6
	1. SCOTLAND, EAST	2	1	4 less	89	+16	15·5	+ 5·1	34	− 7	30	− 6	376	−109	23	− 7
	2. ENGLAND, N.E.	1	less than half	4 less	74	+ 6	8·9	+ 0·8	40	− 7	35	− 6	414	− 88	25	− 5
	3. ENGLAND, EAST	2	3	2 less	67	− 3	8·1	+ 0·4	54	+ 7	49	+ 6	516	− 45	32	− 3
	4. MIDLAND COUNTIES	1	1	4 less	73	+ 7	12·0	+ 2·8	48	+ 8	43	+ 7	423	− 57	26	− 4
	5. ENGLAND, SOUTH	1	1	3 less	76	+12	11·2	+ 1·8	68	+20	62	+18	528	− 34	32	− 2
Principal Grazing Districts.	6. SCOTLAND, WEST	4	5	1 less	102	+27	27·0	+ 9·6	43	− 2	38	− 2	387	−116	24	− 7
	7. ENGLAND, N.W.	3	1	4 less	92	+21	15·6	+ 4·8	53	+10	47	+ 8	447	− 47	27	− 3
	8. ENGLAND, S.W.	1	1	4 less	87	+14	17·3	+ 3·8	60	+10	55	+ 9	505	− 84	31	− 5
	9. IRELAND, NORTH	3	3	2 less	107	+22	18·2	+ 6·3	38	− 5	33	− 4	367	−124	23	− 8
	10. IRELAND, SOUTH	2	2	4 less	98	+20	19·4	+ 4·9	50	+ 4	45	+ 4	433	−120	27	− 7
	— CHANNEL ISLANDS	1	less than half	4 less	90	+13	11·9	+ 0·7	61	+ 4	57	+ 4	626	− 42	38	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was unsettled at the beginning of the period, with showers in many places and thunderstorms over the east and south-east of England, but subsequently it improved greatly, and finally became very fine in all localities, except the extreme north-west, where occasional slight falls of rain were experienced.

Temperature as a whole differed very little from the mean, but was slightly above it in most English districts and a little below it in Ireland and Scotland. The highest of the maxima were registered on Friday, when the thermometer rose to 79° in the Midland Counties and England S. (at Bawtry and in London), to 78° in England E., and 75° or 76° in the other English districts. Elsewhere the highest values ranged from 72° in the Channel Islands, to 67° in Scotland N., and to 62° in Ireland N. The lowest of the minima, which were recorded during the earlier half of the period, were as low as 28° in Scotland E., 30° in the Midland Counties, 31° in Scotland N., and 32° in Scotland W. In all other districts except the Channel Islands (where the minimum was 45°) the thermometer fell to 35° or below. The range of temperature was unusually large—as much as 46° in England S. and 49° in the Midland Counties.

Rainfall was just equal to the mean in Scotland N., but less in all other parts of the Kingdom. In Scotland E., the Channel Islands, and over most parts of England the fall was very insignificant.

Bright Sunshine was much more prevalent than of late, and exceeded the mean in all except the most northern and north-western districts. The percentage of the possible duration ranged from 62 in England S., 57 in the Channel Islands, and 55 in England S.W., to 38 in Scotland W., 33 in Ireland N., and 32 and 30 respectively in Scotland N. and E.

Barometer and Wind. At the commencement of the week a well-defined disturbance was moving east-south-eastwards over our Islands, and the accompanying winds were very strong from the Northward on our western coasts, and from the Westward or North-Westward in the south. This system was followed by an anticyclone from the Atlantic, which moved eastwards and south-eastwards, and finally became established over France and central Europe, while depressions again appeared on our western and north-western coasts. At the end of the period, after one of these disturbances had caused strong winds or gales from the South-Westward on our extreme north-west coasts, another anticyclone came rapidly from the Atlantic, and caused the wind over all our eastern and southern districts to veer to the Northward or North-Eastward.

317 | 90 209 | 70 Wy. & S. Ltd. 12 | 02

II.—DATA from which the SUMMARY on page 115 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	55	36	50·0	38·9	44·1	− 1·4	28	9	4	0·17	− 0·24	*	*	*	*
	Stornoway	55	31	52·9	37·0	44·5	− 2·0	39	14	4	0·57	+ 0·03	34·4	− 8·7	29	− 7
	Wick	67	36	54·4	40·3	46·9	− 0·7	41	5	3	0·34	− 0·07	*	*	*	*
	Lairg Ꞩ	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Glencarron Ꞩ	59	33	53·6	38·7	45·7	− 2·6	40	9	4	1·24	+ 0·20	*	*	*	*
	Fort Augustus Ꞩ	62	32	56·1	39·7	47·4	− 2·2	47	6	4	0·51	+ 0·04	34·7	+ 4·1	30	+ 4
	Fort William	60	36	56·8	41·7	48·8	− 1·4	49	1	4	0·85	+ 0·06	42·6	+ 2·1	37	+ 2
1. SCOTLAND, E.	Nairn	66	31	58·3	39·9	48·6	− 0·9	55	6	3	0·16	− 0·21	*	*	*	*
	Aberdeen	66	39	56·0	42·0	48·6	0·0	46	0	2	0·02	− 0·43	39·7	− 3·9	34	− 3
	Braemar Ꞩ	59	28	53·6	36·3	44·4	− 1·8	41	16	1	0·12	− 0·38	*	*	*	*
	Ochtertyre Ꞩ	63	34	60·1	38·7	48·8	− 1·4	61	9	2	0·05	− 0·49	*	*	*	*
	Leith	65	36	59·0	42·6	50·3	0·0	58	0	3	0·07	− 0·31	*	*	*	*
	Marchmont Ꞩ	68	36	57·0	40·6	48·3	0·0	50	4	1	0·04	− 0·49	34·3	− 7·8	30	− 7
2. ENGLAND, N.E.	Alnwick Castle	74	36	59·0	41·6	49·8	+ 1·5	56	1	2	0·05	− 0·41	*	*	*	*
	Durham	73	35	57·8	41·5	49·2	− 0·1	53	1	1	0·03	− 0·41	33·6	− 5·7	30	− 5
	Shields	73	37	57·9	43·0	50·0	+ 1·1	56	0	1	0·05	− 0·32	*	*	*	*
	Scarborough Ⓜ	76	35	61·0	42·3	51·1	+ 1·4	64	0	0	0·00	− 0·44	49·4	—	44	—
	Spurn Head	66	40	57·9	45·0	51·1	+ 1·0	64	0	0	0·00	− 0·35	*	*	*	*
	Fulbeck (Lincolnshire)	76	36	62·9	43·4	52·6	+ 1·1	74	0	2	0·07	− 0·35	45·1	—	41	—
3. ENGLAND, E.	Hillington Ⓜ	77	38	61·9	41·6	51·1	− 0·2	65	1	2	0·55	+ 0·14	47·0	− 0·5	42	− 1
	Yarmouth	68	40	58·3	45·1	51·3	+ 0·9	65	0	1	0·26	− 0·14	*	*	*	*
	Geldeston	74	38	62·0	43·1	52·0	+ 0·9	70	0	3	0·20	− 0·20	54·7	+ 4·3	49	+ 4
	Cambridge	78	36	64·7	42·6	53·0	+ 0·6	77	0	1	0·28	− 0·14	56·8	+ 10·5	51	+ 10
	Felixstowe	64	39	58·4	46·4	52·0	+ 1·8	70	0	1	0·13	—	67·7†	—	62†	—
	Rothamsted	75	34	62·7	41·2	51·3	0·0	68	2	2	0·16	− 0·30	56·1	+ 11·4	51	+ 10
	Shoeburyness	75	38	62·7	45·9	53·8	+ 3·6	83	0	2	0·16	− 0·14	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	74	38	60·5	42·4	50·9	+ 1·9	62	0	1	0·01	− 0·44	38·4	—	34	—
	Bawtry (Hesley Hall)	79	38	64·7	42·9	53·2	+ 2·0	78	0	1	0·09	− 0·36	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	77	37	64·1	42·1	52·4	+ 0·4	73	0	3	0·16	− 0·30	*	*	*	*
	Cheadle Ⓜ	73	37	60·4	42·3	50·8	+ 1·0	62	0	1	0·12	− 0·41	*	*	*	*
	Birmingham (Edgbaston)	75	39	62·5	44·3	52·9	+ 1·9	76	0	0	0·00	− 0·52	49·2	—	44	—
	Churchstoke Ⓜ	75	32	62·2	41·0	51·0	+ 1·1	67	3	1	0·03	− 0·44	55·5	+ 11·2	50	+ 10
	Hereford Ⓜ	75	33	62·5	41·1	51·2	− 1·1	68	3	1	0·02	− 0·45	*	*	*	*
	Cirencester	74	30	63·1	39·9	50·8	− 0·3	70	6	1	0·03	− 0·46	58·3	+ 11·7	53	+ 11
	Oxford	75	36	64·4	43·6	53·4	+ 0·9	80	0	1	0·10	− 0·30	58·0	+ 13·3	53	+ 12
5 ENGLAND, S.	London	79	38	66·1	44·7	54·8	+ 0·9	90	0	2	0·15	− 0·23	51·6‡	+ 9·8‡	47‡	+ 9‡
	Swarraton (Alresford) Ⓜ	74	33	63·8	41·0	51·7	+ 0·9	72	3	1	0·03	− 0·42	*	*	*	*
	Dungeness	70	40	61·0	47·4	53·8	+ 1·5	83	0	1	0·07	− 0·23	66·9	—	61	—
	Hastings (St. Leonards)	71	41	59·4	46·0	52·3	− 0·1	72	0	1	0·02	− 0·34	76·7	+ 23·2	70	+ 21
	Southampton	75	39	65·0	45·4	54·6	+ 0·8	88	0	2	0·13	− 0·27	70·2	+ 20·8	64	+ 19
	Portland Bill	65	42	58·1	46·6	52·0	0·0	70	0	0	0·00	—	*	*	*	*
	Shaftesbury Ⓜ	71	40	61·4	45·6	53·0	+ 1·8	77	0	1	0·06	− 0·42	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	58	36	56·7	43·2	49·6	− 0·9	53	0	3	1·45	+ 0·61	*	*	*	*
	Glasgow	59	39	56·3	43·3	49·4	− 0·8	52	0	4	0·27	− 0·29	30·8	− 7·1	27	− 6
	Cally Ꞩ	62	32	60·2	40·6	49·8	− 0·4	60	4	4	0·41	− 0·23	*	*	*	*
	Aspatria	63	39	56·7	42·6	49·2	− 1·3	50	0	3	0·19	—	43·7	—	39	—
	Douglas (Isle of Man)	59	33	56·1	42·9	49·1	− 1·1	50	0	4	0·20	− 0·30	53·9	+ 2·3	48	+ 2
7. ENGLAND, N.W	Newton Rigg	68	34	57·6	40·8	48·7	0·0	52	3	3	0·05	—	39·1	—	35	—
	Stonyhurst	72	39	58·8	44·1	51·0	+ 0·4	63	0	3	0·08	− 0·54	52·4	+ 8·0	47	+ 7
	Blackpool Ⓜ	71	35	59·5	43·3	50·9	− 0·4	62	0	3	0·09	− 0·37	57·2	+ 12·0	51	+ 11
	Manchester (Prestwich)	75	34	61·1	43·3	51·7	+ 1·0	68	0	4	0·20	− 0·35	38·2	—	34	—
	Liverpool Obsy. (Bidston)	73	41	59·6	46·3	52·6	+ 0·6	74	0	2	0·11	− 0·31	53·3	—	48	—
	Chester (Hawarden Bridge)	71	36	62·6	44·7	53·1	+ 0·3	78	0	0	0·00	—	*	*	*	*
	Llandudno Ⓜ	73	38	58·4	45·0	51·3	− 0·6	65	0	1	0·04	− 0·37	54·4	+ 8·3	49	+ 7
	Holyhead	59	40	55·3	45·6	50·2	− 1·3	57	0	4	0·13	− 0·28	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	59	41	54·9	45·7	50·0	− 1·0	56	0	2	0·08	− 0·36	52·6	+ 1·1	48	+ 1
	Clifton	76	41	64·6	45·9	54·7	+ 2·5	89	0	1	0·05	− 0·47	*	*	*	*
	Bath	74	34	64·1	42·6	52·7	0·0	75	0	1	0·17	− 0·30	62·3	—	57	—
	Arlington (N. Devon)	72	37	60·4	41·6	50·4	− 0·4	60	1	1	0·03	− 0·61	*	*	*	*
	Cullompton Ⓜ	73	33	63·6	41·2	51·7	− 1·0	71	2	0	0·00	− 0·47	64·9	+ 19·2	60	+ 18
	Falmouth	63	42	59·1	47·5	53·0	+ 0·6	77	0	1	0·11	− 0·45	61·5	+ 8·4	56	+ 8
	Plymouth	64	40	59·7	45·8	52·3	− 1·4	72	0	0	0·00	− 0·44	61·2	+ 11·5	56	+ 11
9. IRELAND, N.	Malin Head	59	43	54·1	46·4	50·0	− 0·1	56	0	3	0·31	− 0·18	*	*	*	*
	Edenfel (Omagh)	62	36	58·1	42·7	49·9	0·0	55	0	3	0·26	− 0·28	*	*	*	*
	Blacksod Point	57	42	54·6	46·0	50·0	− 1·3	56	0	5	0·72	+ 0·09	*	*	*	*
	Markree Castle	62	34	58·2	42·0	49·6	− 0·4	53	0	3	0·43	− 0·15	38·7	− 4·0	34	− 4
	Armagh	62	35	58·6	42·1	49·9	− 0·8	55	0	1	0·13	− 0·35	36·2	− 5·8	32	− 5
	Donaghadee	61	37	55·6	42·6	48·7	− 2·0	47	0	3	0·21	− 0·29	*	*	*	*
10. IRELAND, S.	Dublin	68	41	61·4	45·7	53·1	+ 0·6	78	0	1	0·04	− 0·41	49·3	+ 0·8	44	+ 1
	Birr Castle	65	38	60·6	43·4	51·5	0·0	67	0	2	0·13	− 0·38	55·2	+ 13·5	50	+ 12
	Kilkenny	62	34	59·3	42·0	50·1	− 1·8	57	0	1	0·01	− 0·47	*	*	*	*
	Waterford	59	37	57·0	43·4	49·8	− 2·0	55	0	1	0·08	− 0·45	*	*	*	*
	Roche's Point	58	40	56·0	45·9	50·7	− 2·2	61	0	2	0·11	− 0·54	*	*	*	*
	Valencia	58	36	56·0	44·7	50·0	− 2·4	56	0	5	0·42	− 0·26	45·6	− 2·1	42	− 2
	Killarney	62	34	58·2	42·9	50·1	− 2·0	57	0	4	0·53	− 0·14	*	*	*	*
	Foynes	? 63	36	57·1	42·8	49·5	− 2·1	53	0	2	0·19	− 0·33	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	47	57·7	49·0	53·1	+ 0·2	78	0	1	0·05	− 0·32	56·0	+ 1·3	52	+ 1
	Jersey	72	45	64·1	48·9	56·0	+ 2·2	98	0	0	0·00	− 0·42	68·7	+ 12·0	64	+ 11

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ꞩ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

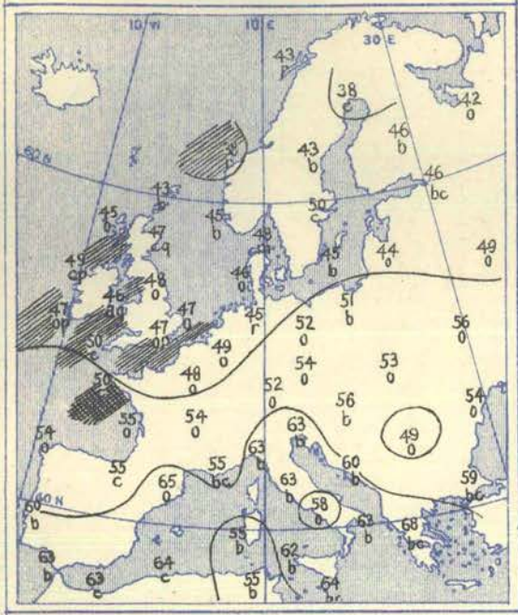
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

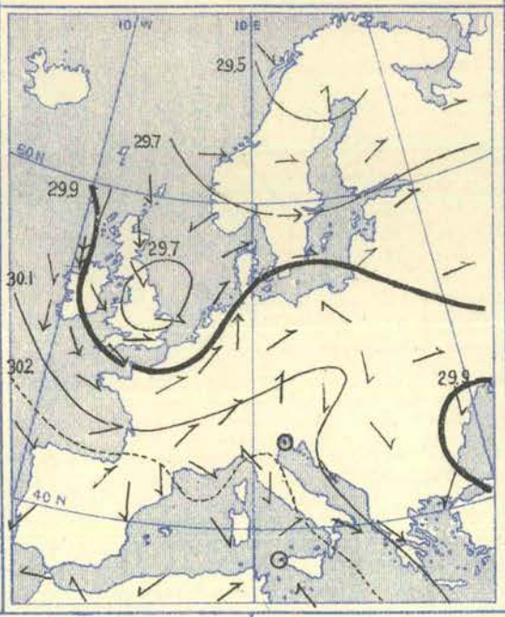
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake

Sunday, 17th May, 1903.

Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.

Weather at 8 a.m. fine and bright in Finland and over most regions bordering the Mediterranean, but cloudy or dull as a whole. Showery or rainy over the United Kingdom, the north-east of France, the west of Norway, and the west of Germany, as well as at Nicolaieff. Sharp thunderstorms during day over the south-east of England and rain becoming general over the Netherlands, Denmark, Germany, and in many parts of central Europe—0·55 in. at Berlin and Brussels, and 0·75 in. at Cape Gris Nez.

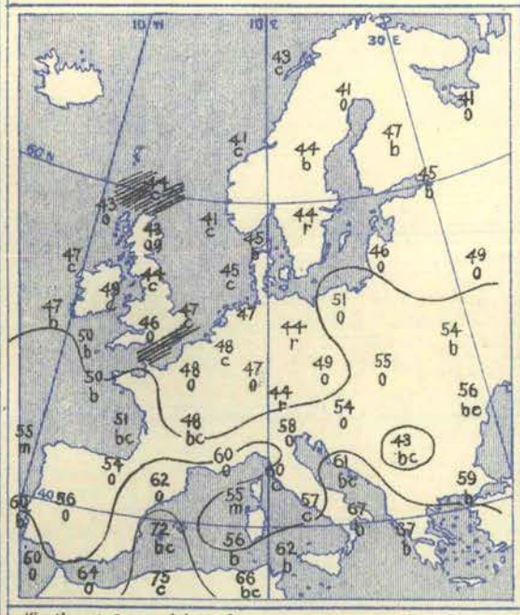
Temperature fallen except over Italy, Algeria, and Spain. Morning readings highest, 68° at Athens, 65° at Barcelona, 64° at Malta and Algiers, and 63° at Brindisi, San Fernando, Rome, and Leghorn. Lowest, 38° at Haparanda and Christiansund, 42° at Archangel and Hangö, 43° in the extreme north of Scotland, and 44° at Riga. Maxima during day considerably below 60° over the United Kingdom, but thermometer rising to 70° or above over Algeria, southern Europe, and many parts of Hungary. Highest value, 77° at Athens, Madrid, and San Fernando.

Wind at 8 a.m. showing a complete cyclonic circulation around the North Sea, the Northerly and North-Westerly winds on our west coasts and the Westerly current in the Channel blowing strongly or with the force of a slight gale. Westerly, strong to moderate, in the far north of Europe, North-Easterly, light, in the south-east, and light and variable over the Mediterranean. The cyclonic swirl becoming less well marked during day and its force decreasing somewhat on our western and southern coasts.

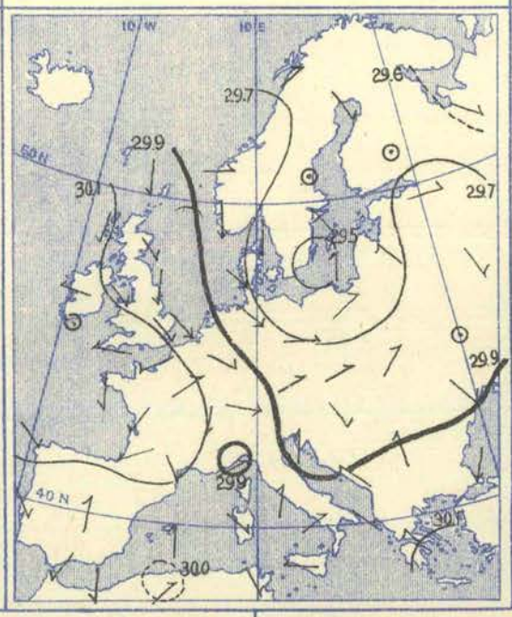
Barometer at 8 a.m. highest, 30·2 ins. and upwards, over Spain and a good part of the Mediterranean, and lowest, 29·5 ins. and less, in a depression over Lapland; but no higher than 29·7 ins. in another system covering the northern half of England and the neighbouring portion of the North Sea, and below 29·9 ins. in a third disturbance over the Black Sea. Cyclonic systems all moving eastwards later and that over the North Sea becoming less well-defined. A small minimum appearing over central Spain.

Monday, 18th May, 1903.

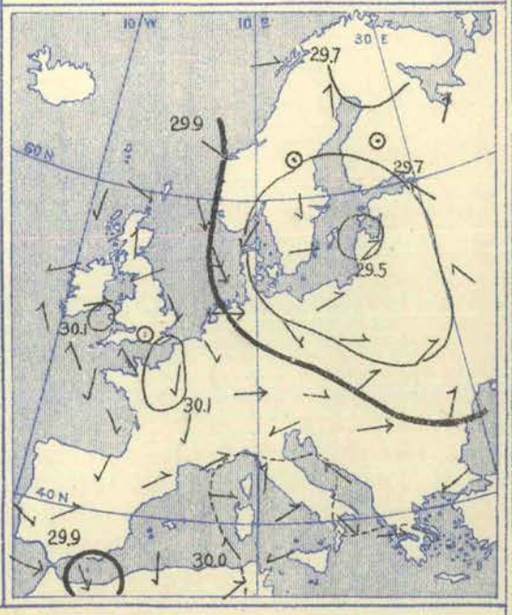
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fair or fine over many parts of southern and south-eastern Europe, and at a few of our own western stations. Cloudy or overcast elsewhere, with rain over Germany, Denmark, and the south of Sweden. Rain falling later in the east of France, most parts of Austria-Hungary, and in different Russian and Finnish localities. Largest amount, 0·63 in. at Riga.

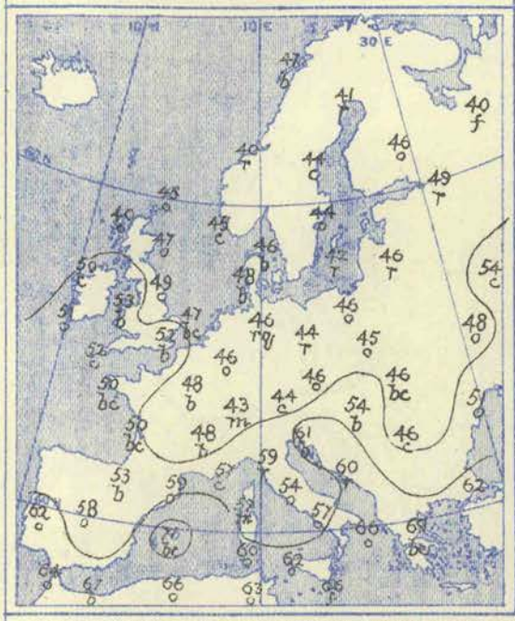
Temperature fallen over central Europe, changed irregularly elsewhere. Morning readings highest, 75° at Algiers, 67° at Brindisi and Athens, 63° at Leghorn and Pesaro, and 60° at Nice and Lisbon. Lowest, (1) between 40° and 44° over Scandinavia and northern Russia; (2) 44° at Munich, Berlin, Breslau, and Limoges; (3) between 43° and 46° over Scotland. Rising subsequently to 59° at Parsonstown and Jersey, to 65° and upwards in most parts of France, and to 70° or upwards in many parts of the Iberian Peninsula, Italy, Algeria, and Greece. Highest readings, 81° at Biskra and 82° at Tunis.

Wind in morning showing a complete cyclonic circulation around the south of Sweden, the North-Westerly current over Denmark being strong. A smaller cyclonic movement prevailing over the South-East of France, but winds in the Mediterranean regions light and variable. North-Westerly wind in Denmark increasing to a fresh gale by evening, but force decreasing as a whole, and direction becoming very variable over the United Kingdom.

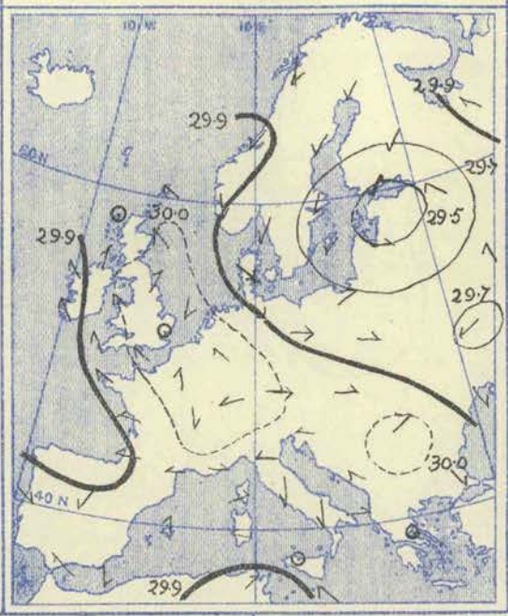
Barometer fallen in the eastern, central, and southern countries, risen in the extreme north and north-west. Readings ranging at 8 a.m. from 30·1 ins. and above in a large area extending from the Atlantic over Ireland, the south-western half of England, and the major portion of France, and 30·1 ins. at Palermo and Patras, to less than 30·0 ins. in a small depression between Algiers and Palma, to 29·9 ins. and less in another small system lying between Nice and Turin, and to below 29·5 ins. in a more important disturbance over the south of Sweden. Last named system and also the large area of high pressure both moving eastwards later and barometer falling slowly over our Islands, France, and Spain.

Tuesday, 19th May, 1903.

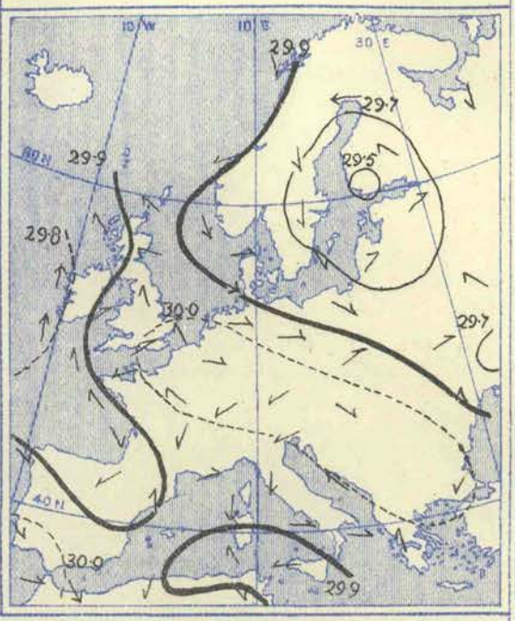
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull generally, with rain in some parts of Sweden, over the Gulf of Finland, at Cuxhaven, Berlin, over the North of Italy, and at Oporto. Fine and bright in most parts of England, France, Denmark, and Greece. Rain falling later on our west and north-west coasts, and a considerable quantity at Biarritz and over Russia. A thunderstorm occurring at Le Havre.

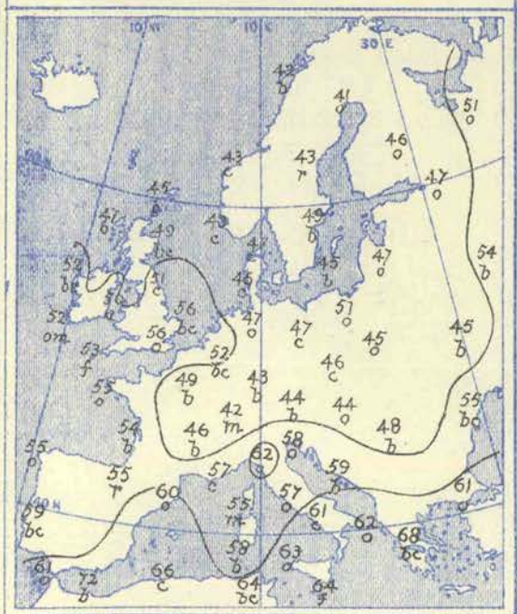
Temperature changed irregularly. Morning readings ranging from 71° at Palma, 69° at Athens, 67° at Oran, 66° at Malta and Brindisi, 61° at Trieste, and 59° on the south coast of France, to below 50° over Europe as a whole, to 41° at Haparanda, and to 40° at Archangel and Stornoway. Maxima during day as high as 81° at Rochefort, between 70° and 80°, in the southern regions generally, 65° in London, and 61° at Parsonstown and St. Petersburg. Readings remaining below 60° over Germany and the Netherlands, and below 50° in Norway.

Wind in morning showing an extensive cyclonic circulation of moderate velocity around the Gulf of Riga and its vicinity. Light and variable over the major portion of the United Kingdom and the southern countries, but fresh from South-East or South in the south of Ireland. No general or important change during day, but Southerly current extending somewhat over our western districts.

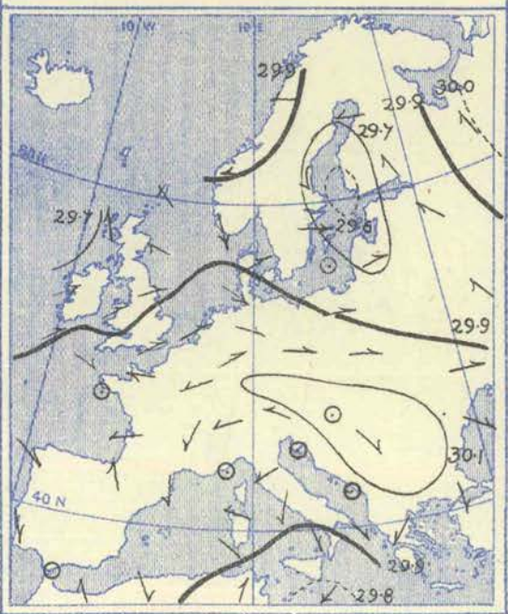
Barometer at 8 a.m. rising over central and the extreme north of Europe, falling elsewhere. Readings ranging from 30·0 ins. and above (1) in a large area covering England, France, the Netherlands and the south-west of Germany, and (2) in a smaller area over Transylvania and the Balkan Principalities to 29·7 ins. and less in a small depression over Little Russia and to less than 29·5 ins. in a larger system over the Gulf of Riga and the neighbouring provinces of Russia. Former minimum moving eastwards later and the latter travelling northwards. Barometer falling slowly over our Islands, rising decidedly over Germany and the Baltic.

Wednesday, 20th May, 1903.

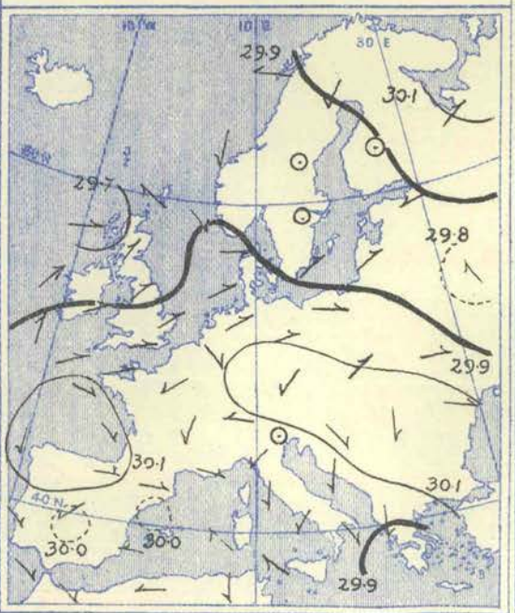
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in a few localities both in the north and south of our area, but cloudy or dull as a whole, with rain at Hernösand and Biarritz, drizzle at Holyhead, and fog at Scilly. Slight rain falling later over our northern and western districts, Scandinavia, North Germany, Russia, and at some stations in the north of Spain. Remaining very fine over France and most southern regions.

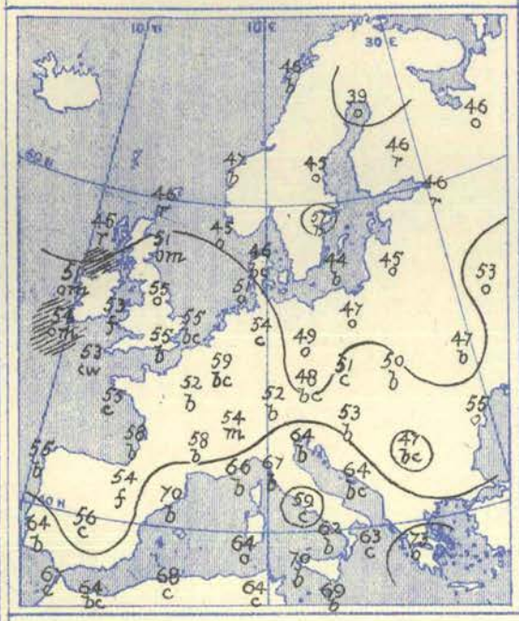
Temperature in morning highest, 72° at Oran, 68° at Patras, 62° at Leghorn and Brindisi, and 59° at Perpignan and on the coast of Portugal. Lowest, (1) 41° at Haparanda and Hangö; (2) 42° at Belfort, 43° at Frankfürt, and 44° at Munich and Vienna; (3) 46° at Kharkov. Exceeding 60° during day in many parts of England, 70° in most parts of France, Italy, Spain and Algeria, and rising to 82° at Tunis, and to 90° at Patras. Maxima below 50° in the extreme north of Scotland and in the west of Norway.

Wind in morning still showing a cyclonic circulation over northern Europe. Light South-Westerly or Southerly and South-Easterly breezes prevailing over our Islands and their vicinity, light to moderate or fresh winds from between North-West and North-East over the Mediterranean, and light anticyclonic airs over the central countries. Not much change as a whole later, but northern cyclonic movement becoming less well marked.

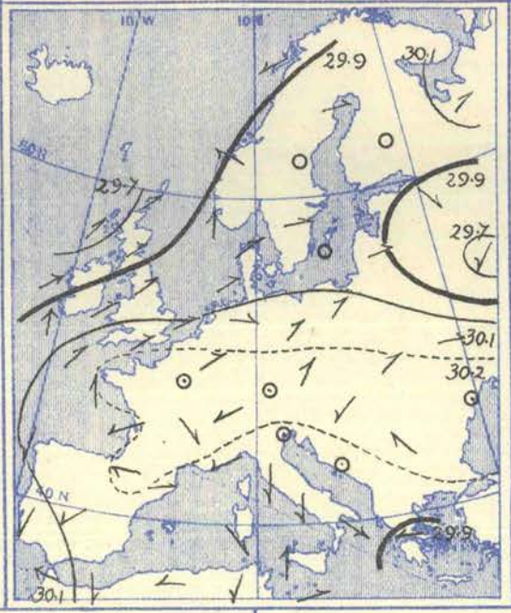
Barometer risen generally, but fallen over the north of Sweden, the central parts of the Mediterranean, the United Kingdom, and the west of Norway. Morning readings ranging from 30·0 ins. to 30·1 ins. and upwards in the anticyclonic band stretching from off the west coast of Spain across central Europe to the Black Sea and Asia Minor, to less than 29·8 ins. in a depression in the neighbourhood of Malta, to below 29·7 ins. in another system off the west of Scotland, and to 29·6 ins. and less in a third over the Gulf of Bothnia. Depression in north becoming less deep during day, that off Scotland moving north-eastwards, and that near Malta apparently travelling eastwards.

Thursday, 21st May, 1903.

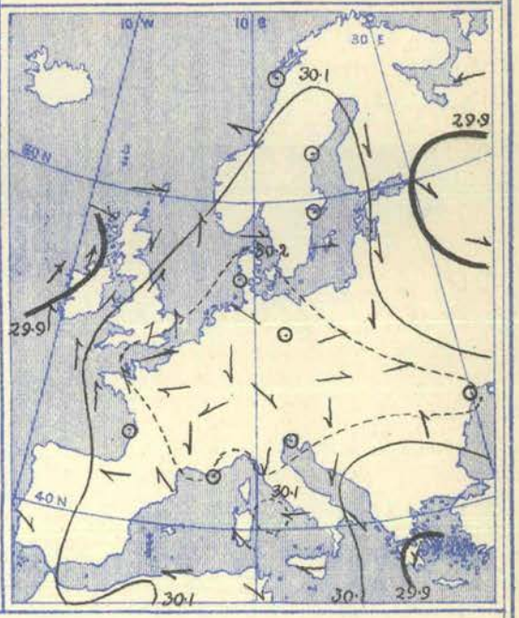
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the southern, and cloudy or dull over the northern half of our area. Rainy in the Hebrides and Shetlands, over Finland, at St. Petersburg, and Swinemünde. Rain falling later in day in the west of Ireland, at Berlin, and in some parts of Algeria. Thunder occurring at Portland Bill.

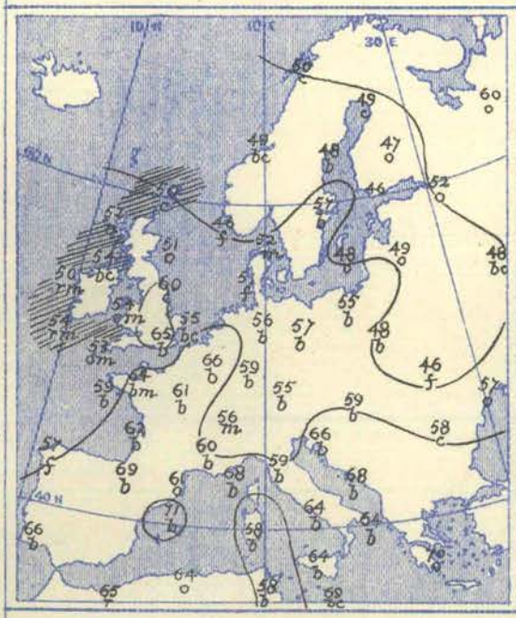
Temperature risen in most places, 8 a.m. readings highest, 73° at Patras, 70° at Palermo and Barcelona, 68° at Oporto, and 64° on the shores of the Adriatic. Lowest, 39° at Haparanda, 42° at Hangö, 45° at Riga, Skudesnaes, and Stornoway, 48° at Prague, 49° at Berlin, and 50° at Vienna. Maxima during day about 70° or a little above over central England, Austria-Hungary, southern Germany and Algeria, nearly 80° in the south of France, and at many Grecian, Italian, and Spanish stations, and 80° at Malta.

Wind in morning Southerly or South-Westerly over north-western Europe, fresh or strong on our extreme west coasts, light or moderate elsewhere. Light and rather variable both over northern and central Europe, and variable or from some Northerly point over the southern regions. No change of importance taking place during day.

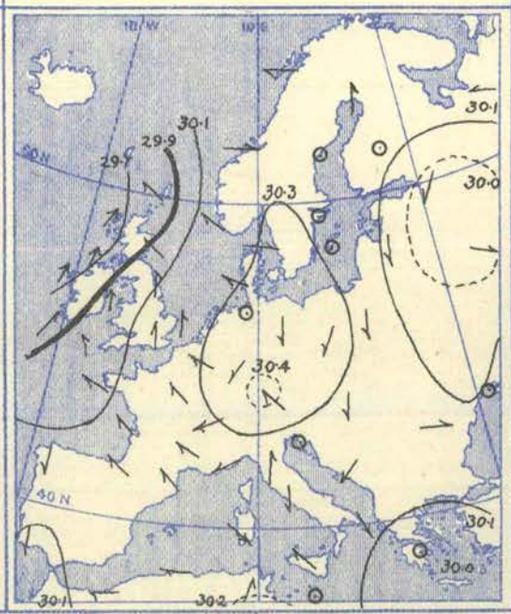
Barometer risen except in Scotland. Readings at 8 a.m. ranging from 30·2 ins. and upwards in a long anticyclonic band stretching from the Bay of Biscay to the Black Sea, and from above 30·1 ins. over the White Sea and its vicinity to 29·9 ins. in a shallow depression over Greece, and to below 29·7 ins. (1) in a disturbance off the Hebrides, and (2) in another system over central Russia. Pressure increasing very generally during day, but falling over the western parts of France and Ireland.

Friday, 22nd May, 1903.

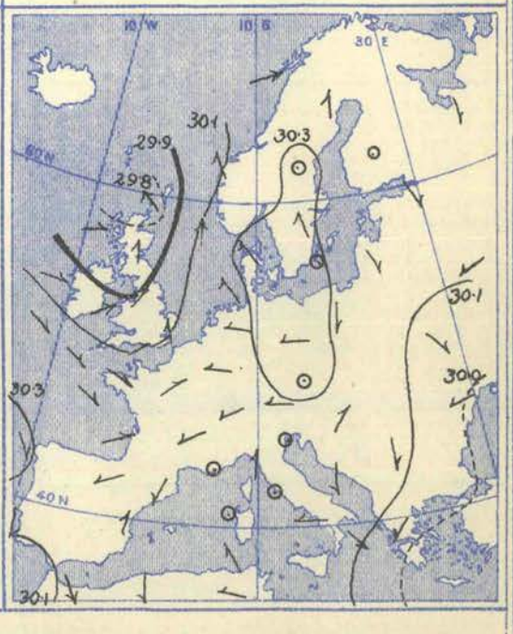
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright as a whole, but dull over Finland and northern Russia, on our western and northern coasts, and in Algeria. Rain falling in the west of Ireland and also at Nemours and Oran. Fog prevailing at Corunna. Rain falling later at most of our own northern and western stations and a slight amount, locally, in London. Thunder occurring in the north-east of Scotland.

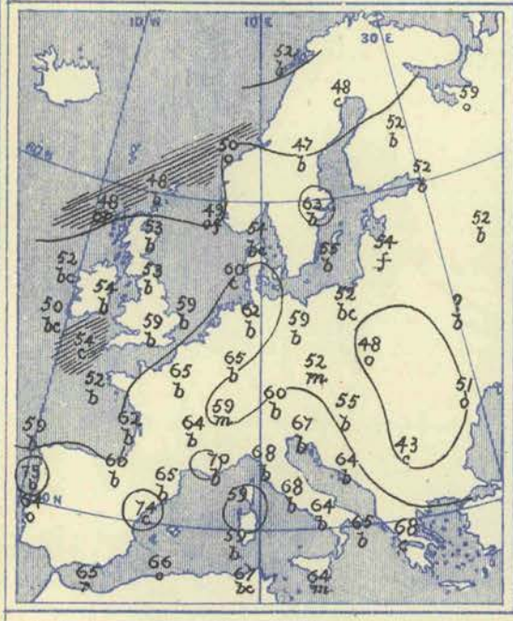
Temperature again risen in most districts. Morning readings highest, 71° at Barcelona, 70° at Athens, 69° at Biarritz, Malta, and Leghorn, 68° at Lésina, Nice, and Oporto; 66° at Brussels, 65° in London, and 60° at Archangel. Lowest, 44° at Ulealborg, 46° at Skudesnaes, 48° at Moscow and Warsaw, and 50° at Blacksod Point. Exceeding 70° later in several parts of England, and touching 79° in London. Maxima in the southern regions between 75° and 80° generally, but exceeding 80° in some localities. Thermometer remaining below 60° in nearly all parts of Ireland and on the coast of Wales.

Wind in morning Southerly over our Islands and their neighbourhood and blowing very strongly in the west and north-west. Light and anticyclonic over all the central regions of Europe, and light and cyclonic over Russia. Wind decreasing in force on our west and north-west coasts later, and veering considerably over the United Kingdom generally.

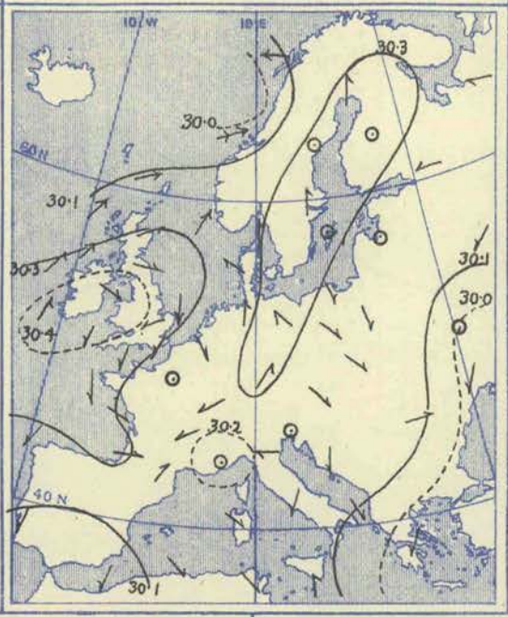
Barometer risen except over Ireland, England, and the west of France. Morning readings ranging from 30·2 ins. to 30·4 ins. in an anticyclone extending southwards from the north of Scandinavia, across central Europe to the east of Algeria, to below 30·0 ins. in a shallow depression over Russia and in a smaller system over Greece, and to less than 29·7 ins. in another and deeper disturbance off our north-west coasts. Latter depression moving north-eastwards later and barometer rising briskly over Ireland and Scotland. Anticyclone decreasing in height and Russian disturbance moving southwards.

Saturday, 23rd May, 1903.

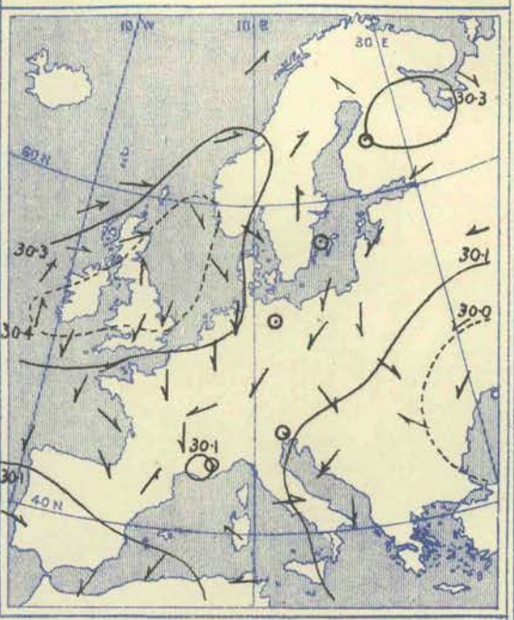
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather in morning very fine and bright generally, but dull on the west coast of Norway and on the northern shores of the Black Sea, and dull and rainy in some parts of Algeria. Slight rain falling later at Stornoway and at a few stations in Norway, Hungary, and Russia, but remaining fine and dry elsewhere.

Temperature risen generally, but fallen over the United Kingdom and France. Morning readings highest, 75° at Oporto, 74° at Barcelona, 70° at Nice, 69° at Brussels, 68° at Athens, 67° at Trieste, 65° at Paris, and 63° at Stockholm. Lowest, 43° at Hernanstadt, 47° at Hernösand, 48° in the extreme north of Scotland, and at Warsaw, 49° at Donaghadee and Skudesnaes, and 52° at Bodö and Moscow. Rising subsequently to 70° or 71° in the south-east of England, and to 60° or above in many parts of the United Kingdom. Maxima exceeding 80° in many of the more southern regions, and a reading of 70° recorded as far north as St. Petersburg.

Wind cyclonic over our extreme northern coasts and in the west of Norway, the Westerly current being strong to a gale at Christiansund, and that from East blowing a strong breeze at Bodö. Light and anticyclonic in almost all other regions. No important change as a whole during day, but wind veering on our extreme northern coasts and in Norway, and decreasing in force.

Barometer risen over the north-western and fallen over the south-eastern half of Europe. Readings at 8 a.m. ranging from 30·4 ins. and upwards in an anticyclone moving north-eastwards over our Islands, and from 30·3 ins. and above in another system moving eastwards over the Continent, to 30·1 ins. or less over the south of Spain, and to 30·0 ins. or less both off the north-west of Norway and the south-east of Europe. Continental anticyclone partially dispersing later, and that over our Islands continuing to travel north-eastwards.

IV.—GENERAL NOTES, etc.

The number of cyclonic disturbances during this week has been much more limited than for a long time past—and the greater part both of the United Kingdom and the Continent has at times been under the influence of anticyclonic systems. At the commencement of the week, a depression had reached the North Sea from the west-north-westward, and this subsequently moved eastwards to the Baltic and Gulf of Finland, whence, after remaining almost stationary for several days and undergoing modifications in form and depth, it finally disappeared over central Russia. Another disturbance of some importance moved north-eastwards outside our north-western coasts to the west of Norway during the later days of the week. The latter system brought rain to our own northern and north-western stations, while the former caused rain over the northern half of Europe generally—especially over the northern parts of Russia, and at some German and Scandinavian stations. Over the southern countries the weather was almost continuously dry. The cyclonic circulation around the first depression was of little strength, but the South-Westerly winds accompanying the second had considerable force on our extreme north-west coasts, and also on the west coast of Norway. Temperature showed an increase generally, which, however, was more decided over Great Britain and the adjacent parts of the Continent than elsewhere, and even there it was not very marked until Friday.

At the close of the period an anticyclone was stretching from our south-west coasts to Norway, and the general distribution of pressure was more favourable to fine weather over Europe as a whole than for many weeks past.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 116.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	37·9	- 3·1	32	- 3	SHEFFIELD	38·4	—	34	—	WESTBOURNE	71·2†	+19·7	65†	+ 18
STRATHPEFFER SPA	37·1	- 2·6	32	- 2	WORKSOP	35·4	- 3·9	32	- 4	VENTNOR HOSPITAL	72·9	+21·6	67	+ 20
EDINBURGH	28·4	- 9·6	25	- 8	THURCASTON	49·8	+ 8·1	45	+ 7	BOURNEMOUTH	—	—	—	—
COCKLE PARK	36·8	—	32	—	TUNBRIDGE WELLS	67·0	—	61	—	MARLBOROUGH	62·5	+19·8	57	+ 18
NEWCASTLE-ON-TYNE	26·5	—	24	—	MARGATE	61·7	+ 17·4	56	+ 16	SOUTHPORT	55·4	—	50	—
YORK	32·7	- 9·0	29	- 8	BROADSTAIRS	63·9	—	58	—	RHYL	56·5	—	50	—
CROMER	51·2	—	46	—	RAMSGATE	—	—	—	—	ABERDOVEY	72·7†	—	66†	—
LOWESTOFT	53·7	—	48	—	EASTBOURNE	80·2	+ 28·6	74	+ 26	TENBY	—	—	—	—
HOLLESLEY BAY	56·3	—	51	—	BRIGHTON	70·4	+ 20·2	65	+ 19	TORQUAY	73·0	+21·8	67	+ 20
DUNMOW	56·0	—	51	—	WORTHING	74·5	—	68	—	NEWQUAY	57·9	+ 7·8	53	+ 7
					BOGNOR	71·7†	—	66†	—	GUERNSEY	58·7†	- 0·4	54†	0
					WATERGATE PARK	69·0	—	63	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending May 2nd, 1903.	Bognor	—	—	—	—	—	—	—	—	—	—	—	32·4	—	32	—
" " " 16th "	Ventnor	—	—	—	—	—	—	—	—	—	—	—	18·0	- 32·7	17	- 31
" " " " "	Tenby	—	—	—	—	—	—	—	—	—	—	—	25·9	- 23·6	24	- 22

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 21.] *Third Series.* WEEK ENDING SATURDAY, MAY 30TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 122.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	74	39	61·4	44·7	52·6	3 above	74	+18	0	− 4	386	− 25	483	− 49
	1. SCOTLAND, EAST	76	37	64·5	42·9	53·1	3 above	78	+11	0	− 3	475	− 40	499	− 82
	2. ENGLAND, N.E.	69	34	59·4	43·5	51·0	0 (average)	63	− 2	0	− 2	572	+ 58	342	−136
	3. ENGLAND, EAST	77	33	65·0	46·2	55·1	3 above	92	+ 8	0	− 2	742	+ 84	322	−202
	4. MIDLAND COUNTIES	77	32	66·6	44·5	54·9	2 above	90	+ 5	0	− 2	686	− 4	355	−179
	5. ENGLAND, SOUTH	79	37	67·7	49·1	57·8	4 above	111	+20	0	− 1	794	+ 51	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	74	36	68·2	46·8	56·9	5 above	104	+31	0	− 2	562	− 2	317	− 95
	7. ENGLAND, N.W.	73	35	67·1	47·4	56·7	4 above	103	+24	0	− 1	641	+ 48	259	−128
	8. ENGLAND, S.W.	73	40	66·6	49·4	57·5	4 above	109	+25	0	− 1	808	+ 82	162	−138
	9. IRELAND, NORTH	77	36	65·2	47·1	55·6	4 above	95	+20	0	− 1	597	− 44	286	− 60
	10. IRELAND, SOUTH	75	38	67·4	47·4	56·8	4 above	104	+20	0	− 1	801	+ 18	183	− 67
	— CHANNEL ISLANDS	70	49	64·1	52·4	57·9	3 above	111	+19	0	0	989	+121	49	− 68

Rainfall.

	DISTRICTS. (See p. 122.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	less than half	6 less	107	+18	30·2	+11·8
	1. SCOTLAND, EAST	1	1	4 less	90	+14	15·6	+ 4·8
	2. ENGLAND, N.E.	2	1	4 less	76	+ 5	9·0	+ 0·5
	3. ENGLAND, EAST	2	1	3 less	69	− 4	8·2	+ 0·1
	4. MIDLAND COUNTIES	3	5	0 (average)	76	+ 7	12·5	+ 2·8
	5. ENGLAND, SOUTH	2	6	2 more	78	+11	11·8	+ 2·0
Principal Grazing Districts.	6. SCOTLAND, WEST	1	3	4 less	103	+24	27·3	+ 9·2
	7. ENGLAND, N.W.	1	1	4 less	93	+19	15·7	+ 4·4
	8. ENGLAND, S.W.	3	6	1 more	90	+14	17·9	+ 3·8
	9. IRELAND, NORTH	2	3	2 less	109	+20	18·5	+ 6·0
	10. IRELAND, SOUTH	1	2	3 less	100*	+19	19·6	+ 4·5
	— CHANNEL ISLANDS	2	5	0 (average)	92	+12	12·4	+ 0·8

Bright Sunshine.

	DISTRICTS. (See p. 122.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	51	+13	43	+11	389	− 91	22	− 5
	1. SCOTLAND, EAST	62	+21	53	+18	438	− 88	25	− 5
	2. ENGLAND, N.E.	62	+25	54	+21	476	− 64	27	− 4
	3. ENGLAND, EAST	71	+22	63	+19	587	− 23	34	− 1
	4. MIDLAND COUNTIES	56	+14	50	+13	479	− 43	27	− 2
	5. ENGLAND, SOUTH	72	+24	65	+22	600	− 9	34	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	69	+25	59	+22	456	− 90	26	− 5
	7. ENGLAND, N.W.	69	+25	61	+22	516	− 22	30	− 1
	8. ENGLAND, S.W.	60	+ 9	54	+ 8	565	− 75	32	− 4
	9. IRELAND, NORTH	71	+30	62	+26	438	− 94	25	− 5
	10. IRELAND, SOUTH	68	+23	61	+20	501	− 98	29	− 6
	— CHANNEL ISLANDS	69	+11	63	+10	695	− 31	40	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was very fine and dry until towards the end of the week, when thunderstorms were experienced, at first over our more southern counties and afterwards as far north as Cumberland. The storms varied a good deal in intensity, and appear to have been more violent in the neighbourhood of Oxford and London than elsewhere.

Temperature was above the mean except in England N.E. The excess was slight over the eastern districts, but amounted to as much as 4° or 5° in England S. and over the western parts of the Kingdom. The highest of the maxima were recorded during the earlier half of the week in Ireland and Scotland, but on Saturday in most parts of England. They ranged from 79° in England S. (in London), 77° in England E. and the Midland Counties, and 76° in Scotland E. to 70° in the Channel Islands, and to 69° in England N.E. The lowest of the minima, which were registered between the 24th and 26th, were as low as 32° in the Midland Counties, and 33° in England E., while elsewhere they ranged from 34° in England N.E. to 40° in England S.W., and to 49° in the Channel Islands. The range of temperature during the week was thus again very large.

Rainfall was less than the mean as a whole, but just equal to it in the Midland Counties and the Channel Islands, and more in England S. and S.W. During the thunderstorm over the Metropolitan district on Saturday afternoon, the fall was very variable; at Brixton it was only 0·29 in., and at the Meteorological Office rather less, while at Wandsworth Common it was 1·5 ins., and at Parsons Green as much as 2·0 ins.

Bright Sunshine exceeded the mean in all districts. The percentage of the possible duration ranged from 65 in England S. and above 60 in several other districts, to 50 in the Midland Counties, and to 43 in Scotland N.

Barometer and Wind. During the whole of this week, the barometer was highest in the north and lowest in the south, but, while during the earlier half of the period the readings were high, the gradients moderate, and the prevailing North-Easterly to Easterly winds fresh or strong on our south and south-east coasts, by the latter part of the time, the barometric level had sunk considerably, gradients had become less steep, and the winds light and somewhat variable in direction. At the end of the period, a well-defined shallow depression had reached Ireland from the Bay of Biscay, and to this, and some slight irregularities in pressure in the south-east, were due the thunderstorms over our southern and south-western districts.

317 | 90 209 | 70 Wy. & S. Ltd. 12 | 02

II.—DATA from which the SUMMARY on page 121 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	56	43	52·7	45·0	48·6	+ 2·1	46	0	0	0·00	- 0·42	*	*	*	*
	Stornoway	62	41	58·6	42·9	50·3	+ 1·6	58	0	2	0·10	- 0·45	44·3	+ 1·2	37	+ 1
	Wick	59	39	57·6	43·6	50·2	+ 1·4	57	0	1	0·01	- 0·40	*	*	*	*
	Lairg $	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Glencarron $	74	41	68·5	44·6	55·8	+ 6·1	97	0	1	0·02	- 1·05	*	*	*	*
	Fort Augustus $	70	40	61·9	44·4	52·6	+ 1·6	74	0	1	0·01	- 0·46	49·0	+ 18·5	41	+ 16
	Fort William	72	43	69·2	47·7	57·8	+ 6·5	111	0	1	0·01	- 0·81	60·9	+ 20·3	52	+ 17
1. SCOTLAND, E.	Nairn	71	39	62·4	44·0	52·7	+ 1·8	75	0	2	0·02	- 0·36	*	*	*	*
	Aberdeen	64	39	60·3	43·7	51·5	+ 1·5	67	0	0	0·00	- 0·44	61·9	+ 18·2	52	+ 15
	Braemar $	72	37	67·6	39·6	52·8	+ 5·0	86	7	0	0·00	- 0·50	*	*	*	*
	Ochtertyre $	76	38	71·1	42·3	55·8	+ 4·3	97	0	1	0·21	- 0·35	*	*	*	*
	Leith $	69	40	60·6	44·9	52·3	+ 0·6	72	0	1	0·11	- 0·29	*	*	*	*
	Marchmont $	70	39	64·7	43·0	53·2	+ 3·6	78	0	1	0·02	- 0·53	69·8	+ 28·1	60	+ 24
2. ENGLAND, N.E.	Alnwick Castle	65	34	60·4	41·7	50·5	+ 0·9	61	1	1	0·02	- 0·44	*	*	*	*
	Durham	66	36	61·0	42·1	51·0	+ 0·1	63	0	2	0·06	- 0·38	62·2	+ 23·0	54	+ 20
	Shields	60	41	55·4	44·6	49·7	- 0·6	54	0	2	0·08	- 0·31	*	*	*	*
	Scarborough Ⓜ	57	42	55·5	44·9	49·9	- 1·4	55	0	2	0·03	- 0·41	53·5	—	47	—
	Spurn Head	59	43	57·0	45·4	50·9	- 0·8	62	0	1	0·18	- 0·17	*	*	*	*
	Fulbeck (Lincolnshire)	69	35	67·2	42·0	53·8	+ 0·8	83	0	2	0·04	- 0·39	56·5	—	50	—
3. ENGLAND, E.	Hillington Ⓜ	75	?39	66·7	45·9	55·7	+ 2·9	96	0	3	0·24	- 0·19				
	Yarmouth	61	44	57·4	48·3	52·6	+ 0·8	74	0	1	0·02	- 0·39	*	*	*	*
	Geldeston	68	39	63·2	45·4	53·8	+ 1·2	83	0	1	0·01	- 0·39	77·5	+ 27·5	69	+ 24
	Cambridge	77	33	72·3	43·3	56·9	+ 3·0	104	0	2	0·13	- 0·30	67·0	+ 21·0	60	+ 19
	Felixstowe	72	40	63·0	47·4	54·7	+ 3·0	89	0	2	0·05	—	79·3†	—	71†	—
	Rothamsted	74	35	68·3	45·2	56·1	+ 3·3	99	0	3	0·04	- 0·42	61·3	+ 16·6	55	+ 15
	Shoeburyness	70	41	64·3	48·0	55·7	+ 3·8	96	0	2	0·16	- 0·15	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	66	35	64·0	42·1	52·4	+ 2·0	73	0	1	0·03	- 0·47	58·6	—	51	—
	Bawtry (Hesley Hall)	71	32	67·4	41·6	53·7	+ 0·9	84	1	1	0·01	- 0·45	*	*	*	*
	Loughborough	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Colly Weston (Stamford)	73	37	69·0	45·4	56·5	+ 3·0	102	0	3	0·06	- 0·39	*	*	*	*
	Cheadle Ⓜ	67	40	64·3	46·3	54·8	+ 3·6	90	0	1	0·05	- 0·52	*	*	*	*
	Birmingham (Edgbaston)	67	42	65·8	46·5	55·6	+ 3·1	95	0	4	0·34	- 0·20	51·3	—	45	—
	Churchstoke Ⓜ	69	35	65·7	43·9	54·2	+ 2·7	85	0	3	0·26	- 0·23	61·3	+ 16·8	54	+ 15
	Hereford Ⓜ	69	36	66·7	44·5	54·9	+ 1·0	90	0	4	1·02	+ 0·55	*	*	*	*
	Cirencester	74	38	67·3	45·1	55·5	+ 3·0	95	0	4	1·42	+ 0·92	61·4	+ 14·8	55	+ 13
	Oxford	77	38	69·1	45·4	56·5	+ 2·5	102	0	4	1·50	+ 1·07	55·9	+ 10·8	50	+ 10
5 ENGLAND, S.	London	79	42	71·3	48·9	59·4	+ 4·1	122	0	3	0·97	+ 0·57	58·8↓	+ 17·0↓	53↓	+ 15↓
	Swarraton (Alresford) Ⓜ	76	37	69·4	46·6	57·3	+ 5·1	107	0	3	0·61	+ 0·16	*	*	*	*
	Dungeness	68	48	62·7	51·3	56·7	+ 3·1	103	0	2	0·17	- 0·13	71·2	—	64	—
	Hastings (St. Leonards)	75	44	68·5	50·2	58·8	+ 5·2	118	0	3	0·64	+ 0·27	81·6	+ 28·1	74	+ 25
	Southampton	75	43	72·6	50·1	60·7	+ 5·5	131	0	2	0·26	- 0·16	74·7	+ 25·1	67	+ 23
	Portland Bill	70	47	64·3	49·6	56·5	+ 3·3	102	0	2	0·57	—	*	*	*	*
	Shaftesbury Ⓜ	71	42	64·8	47·0	55·4	+ 2·9	94	0	2	0·75	+ 0·27	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	74	44	69·5	48·4	58·3	+ 6·4	114	0	1	0·06	- 0·81	*	*	*	*
	Glasgow	73	44	67·1	46·3	56·1	+ 4·6	99	0	2	0·21	- 0·36	63·1	+ 25·3	54	+ 22
	Cally $	74	40	70·6	47·4	58·3	+ 7·0	114	0	2	0·32	- 0·35	*	*	*	*
	Aspatria	72	37	68·3	44·8	55·9	+ 4·4	97	0	1	0·31	—	66·0	—	57	—
	Douglas (Isle of Man)	70	36	65·5	47·2	55·8	+ 4·3	97	0	1	0·53	+ 0·03	76·5	+ 24·9	67	+ 22
7. ENGLAND, N.W	Newton Rigg	72	35	69·3	41·8	54·7	+ 4·5	90	1	2	0·08	—	77·6	—	68	—
	Stonyhurst	69	42	66·9	47·1	56·4	+ 4·3	101	0	1	0·10	- 0·55	77·4	+ 32·8	68	+ 29
	Blackpool Ⓜ	72	40	69·0	46·1	56·9	+ 4·2	104	0	0	0·00	- 0·46	71·1	+ 25·8	62	+ 23
	Manchester (Prestwich)	69	40	67·2	45·5	55·7	+ 3·6	96	0	1	0·10	- 0·48	69·6	—	61	—
	Liverpool Obsy. (Bidston)	71	44	68·1	48·3	57·6	+ 4·2	109	0	2	0·08	- 0·35	56·3	—	49	—
	Chester (Hawarden Bridge)	71	44	67·4	49·9	58·1	+ 4·0	113	0	1	0·10	—	*	*	*	*
	Llandudno Ⓜ	73	45	66·2	50·5	57·9	+ 4·6	111	0	2	0·24	- 0·18	63·4	+ 17·1	56	+ 15
	Holyhead	65	45	63·0	49·9	56·1	+ 3·2	99	0	2	0·19	- 0·23	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	69	49	64·0	51·4	57·3	+ 5·1	107	0	2	0·28	- 0·16	55·7	+ 3·3	50	+ 3
	Clifton	73	45	68·8	48·7	58·2	+ 4·6	113	0	3	0·95	+ 0·43	*	*	*	*
	Bath	73	40	68·9	46·4	57·0	+ 2·9	105	0	4	0·91	+ 0·43	60·8	—	55	—
	Arlington (N. Devon)	70	42	66·0	46·6	55·7	+ 3·6	96	0	2	0·48	- 0·17	*	*	*	*
	Cullompton Ⓜ	71	42	68·9	47·7	57·7	+ 3·6	110	0	3	0·72	+ 0·24	57·4	+ 11·4	52	+ 10
	Falmouth	67	51	63·1	52·3	57·4	+ 3·6	108	0	3	0·43	- 0·13	59·4	+ 5·8	54	+ 5
	Plymouth	71	51	66·4	52·8	59·2	+ 4·1	120	0	4	0·42	- 0·03	59·9	+ 9·9	55	+ 9
9. IRELAND, N.	Malin Head	67	47	59·4	49·1	53·9	+ 2·6	83	0	2	0·22	- 0·28	*	*	*	*
	Edenfel (Omagh)	77	42	71·1	48·0	55·9	+ 7·6	118	0	2	0·43	- 0·14	*	*	*	*
	Blacksod Point	71	45	63·1	50·0	56·2	+ 3·8	99	0	1	0·10	- 0·53	*	*	*	*
	Markree Castle	74	39	68·1	44·5	55·6	+ 4·4	95	0	2	0·47	- 0·15	68·0	+ 26·0	59	+ 23
	Armagh	70	36	67·7	44·0	55·1	+ 3·0	92	0	1	0·67	+ 0·17	74·6	+ 33·1	65	+ 29
	Donaghadee	66	42	61·7	46·9	53·9	+ 1·9	83	0	1	0·10	- 0·40	*	*	*	*
10. IRELAND, S.	Dublin	68	45	66·3	49·9	57·6	+ 3·7	109	0	2	0·50	+ 0·05	66·5	+ 18·5	58	+ 16
	Birr Castle	73	40	68·9	46·7	57·1	+ 4·3	106	0	1	0·06	- 0·47	69·4	+ 28·1	61	+ 25
	Kilkenny	73	38	68·7	46·1	56·7	+ 3·7	103	0	1	0·24	- 0·26	*	*	*	*
	Waterford	71	40	67·9	48·6	57·7	+ 4·7	110	0	1	0·22	- 0·32	*	*	*	*
	Roche's Point	70	41	64·0	49·3	56·2	+ 2·2	99	0	1	0·23	- 0·43	*	*	*	*
	Valencia	72	38	65·9	46·4	55·6	+ 2·1	95	0	2	0·33	- 0·39	69·2	+ 22·0	62	+ 20
	Killarney	75	40	68·4	45·9	56·5	+ 3·3	102	0	2	0·27	- 0·39	*	*	*	*
	Foynes	73	38	69·2	46·2	57·0	+ 4·1	105	0	0	0·00	- 0·54	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	49	60·9	51·1	55·7	+ 1·7	96	0	1	0·01	- 0·37	74·5	+ 19·0	68	+ 17
	Jersey	70	51	67·3	53·7	60·1	+ 5·0	127	0	3	0·88	+ 0·45	67·9	+ 10·9	62	+ 10

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked $ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

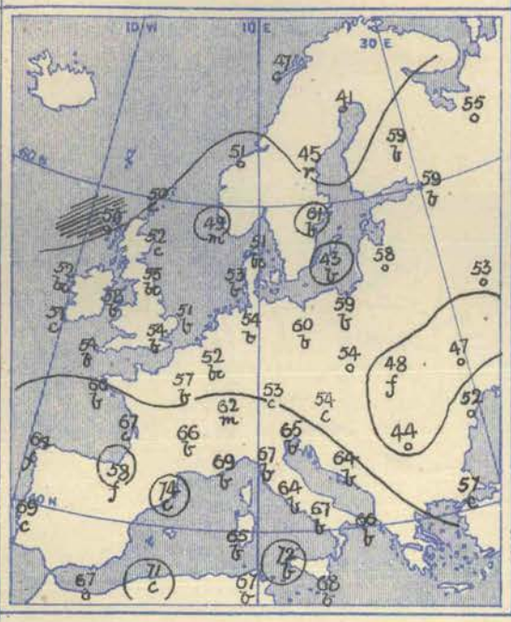
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

↓ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

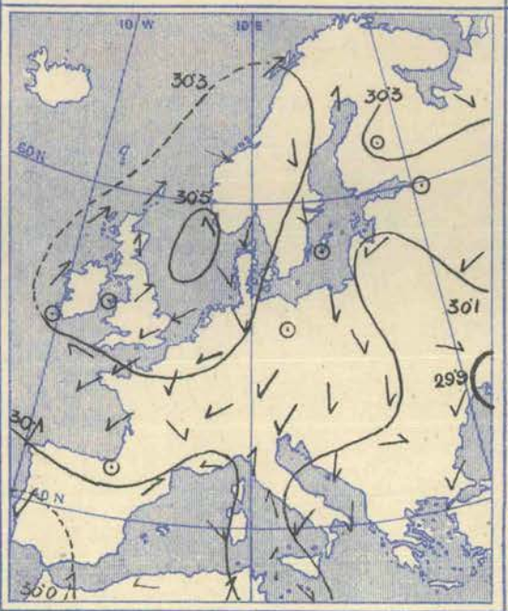
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 24th May, 1903.

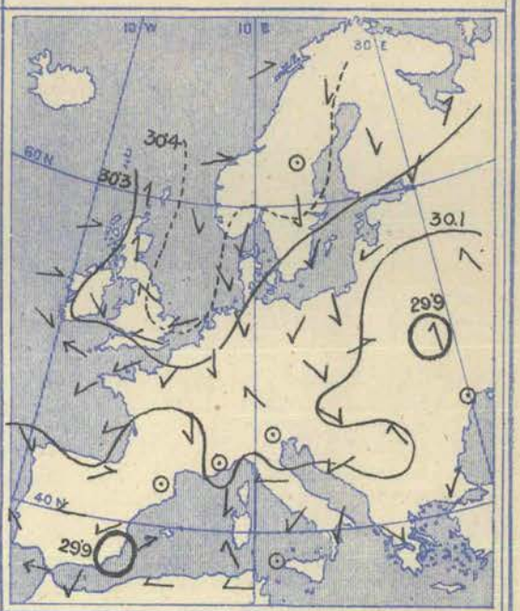
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright generally, but cloudy or dull in various parts of Russia and central Europe, as well as in western Algeria, and foggy at Biarritz and Corunna. A little rain falling later at Stornoway, Bodö, Munich, at a few Russian stations, and at Athens, but remaining fine over Europe as a whole.

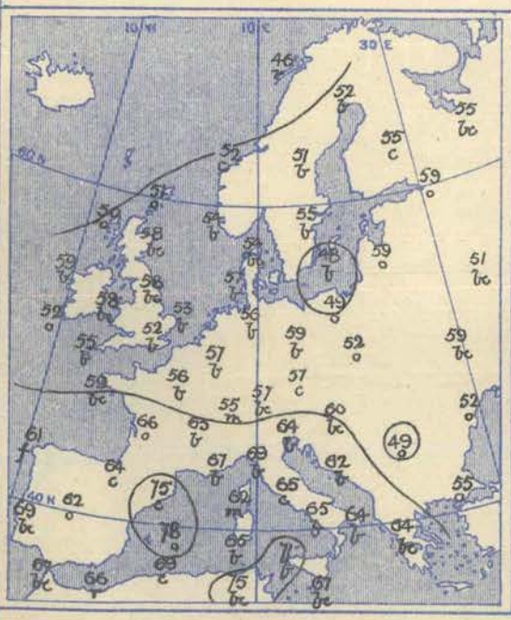
Temperature fallen in most regions. Morning readings ranging from 74° at Barcelona and Oporto, 72° at Palermo, 71° at Algiers, 69° at Nice, 65° at Trieste, and 61° at Stockholm, to below 55° in most parts of our Islands, to 43° at Wisby, and to 41° at Haparanda. Rising subsequently to 66° in London and at Oxford, 69° at Parsonstown, to above 70° over central Europe, above 75° in nearly all southern regions, and above 80° at some stations in Algeria, Spain, and France. Highest readings of all, 93° at Rochefort. Thermometer not recording 60° on our own eastern coasts.

Wind in morning showing an extensive anticyclonic circulation around the North Sea, the Easterly current on our south-east coasts, and that from the Southward in the Hebrides being fresh or strong in force. Light and cyclonic over the south of Russia, and the extreme south-west of our area. Very little change taking place during day.

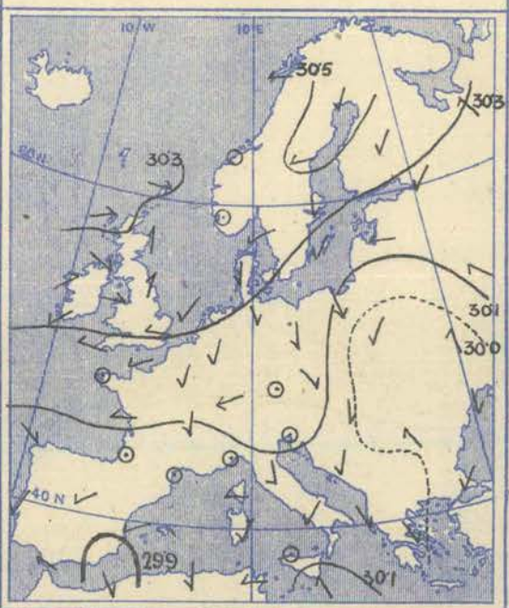
Barometer fallen generally, but risen in most parts of north-western Europe. Morning readings ranging from 30·5 ins. and above, to 30·3 ins. in a large anticyclone covering these Islands, the North Sea, the Netherlands, Denmark, and the greater part of Scandinavia, to below 30·0 ins. over the southern parts of Spain and Portugal, and to below 29·9 ins. over the south of Russia. No material change in the distribution of pressure during day, but barometer falling within the anticyclonic area.

Monday, 25th May, 1903.

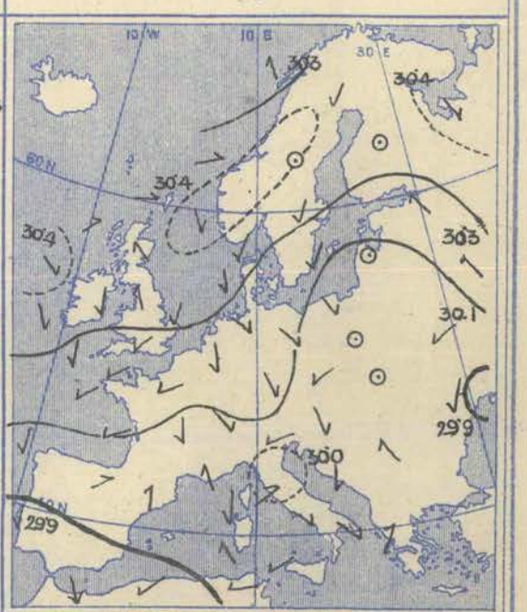
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright as a whole, but cloudy or dull in several parts of Russia, Poland, and Scotland. Rainy at Bodö and Oran, and thundery at Wick. Continuing very fine all day generally, but rain falling at many Russian stations, at Cracow and Wisby, and also in a few German localities. Largest amount, 0·55 in. at Kharkov.

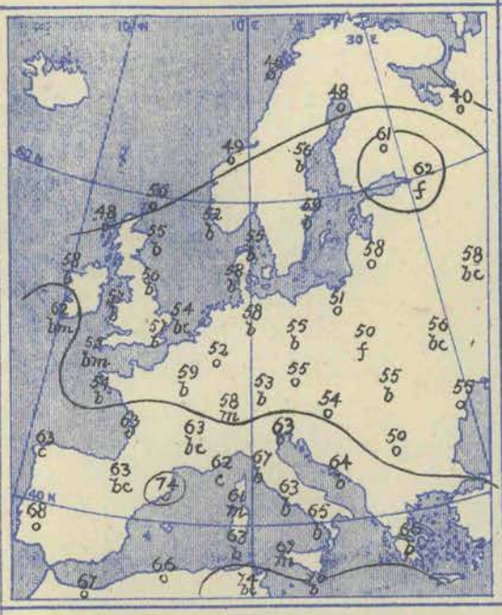
Temperature changed irregularly. Morning readings highest, 78° at Palma, 75° at La Calle, 72° at Oporto, 71° at Palermo, 69° at Leghorn, and 68° at Limoges. Lowest, (1) 46° at Bodö, 48° at Wisby, (2) 50° in the Hebrides and at Oxford, (3) 49° at Hermanstadt. Rising later to nearly 90° in Algeria, above 80° at several Spanish, Italian, and French stations, and to 70° or above in most parts of central Europe, as well as at St. Petersburg, and in different parts of the United Kingdom. Maximum no higher than 48° in Gothland, but 66° at Stockholm, and 61° at Haparanda.

Wind light and anticyclone over all the more northern countries, and light and cyclonic over south-eastern Europe and the western portion of the Mediterranean. Very little change as a whole during day, but a feeble cyclonic circulation setting in over the north of Italy.

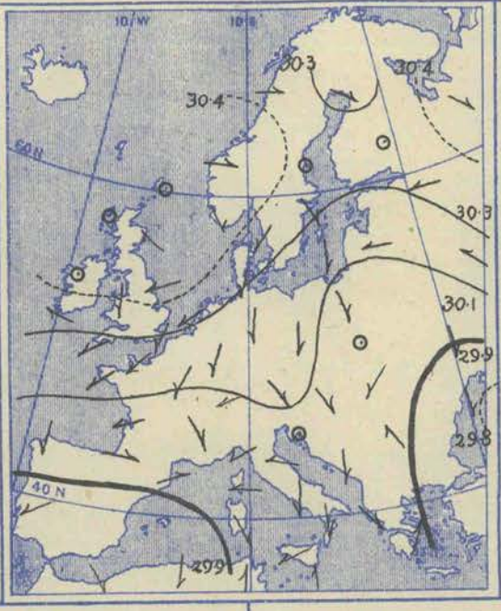
Barometer risen over Sweden and Finland, fallen elsewhere. Morning readings ranging from 30·5 ins. and upwards over the north of Sweden, and between that value and 30·3 ins. in a broad band stretching thence across the North Sea and our Islands to the Atlantic, to below 30·0 ins. in a large irregularly shaped low pressure area over the south of Russia and Turkey, and to below 29·9 ins. in a smaller but better defined system lying between Alicante and Nemours. Latter system disappearing during day, but a small depression forming over northern Italy. High pressure area diminishing slowly in intensity.

Tuesday, 26th May, 1903.

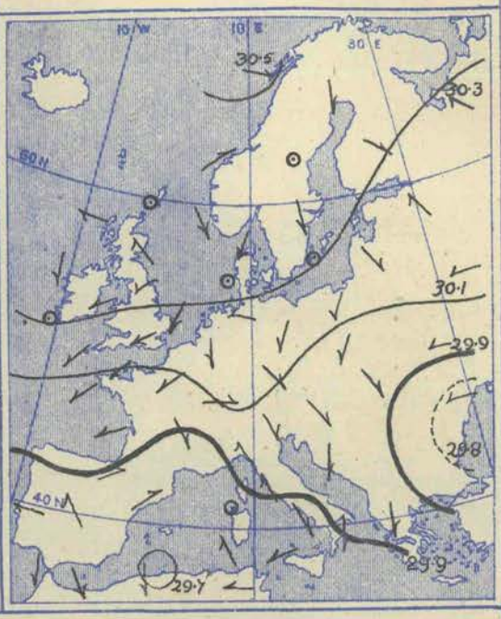
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or dull in the extreme north of Europe, in the south of Russia, and at several German, French, Spanish, and Algerian stations. Rain falling at Uleaborg and Nicolaieff, and fog prevailing at Cape Sicié, as well as at Malin Head and Wisby. Fine in most other regions. Heavy rain (0·83 in.) experienced later at St. Petersburg and smaller amounts at some Austrian, German, and Finnish stations, and also at Florence, San Fernando, and Athens. Thunder and lightning occurring at night in the south of France.

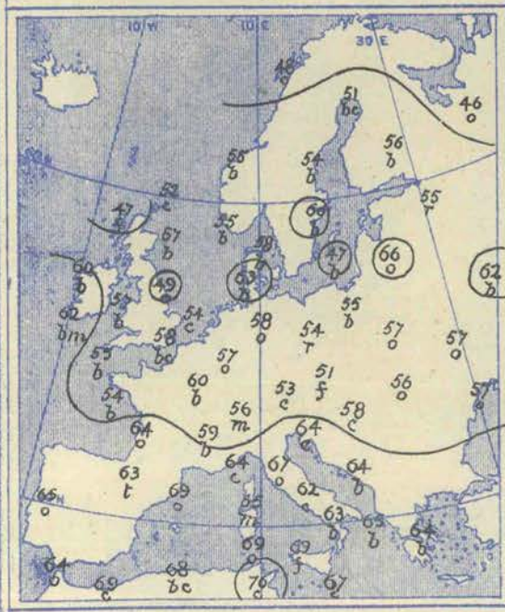
Temperature risen in Ireland, fallen in the north of Russia, changed irregularly elsewhere. Ranging at 8 a.m. from 74° at Tunis and Barcelona and 70° at Malta and Oporto, to below 60° over Europe as a whole, to below 50° over the north of Scandinavia, and to 40° at Archangel. Rising later to 70° at Portland Bill, 72° at Valencia Island to above 75° in most southern and central countries, and to 90° at Tunis. Remaining below 60° at some of our east coast stations, but touching 70° at Stockholm, and 77° at St. Petersburg.

Wind in morning light and cyclonic over the south of Russia, and also over Spain and the adjacent portion of the Mediterranean. North-Easterly anticyclonic breezes prevailing in almost all other regions and blowing freshly on our south-east coasts, but a light Westerly wind blowing on the west coast of Norway. Very little change later.

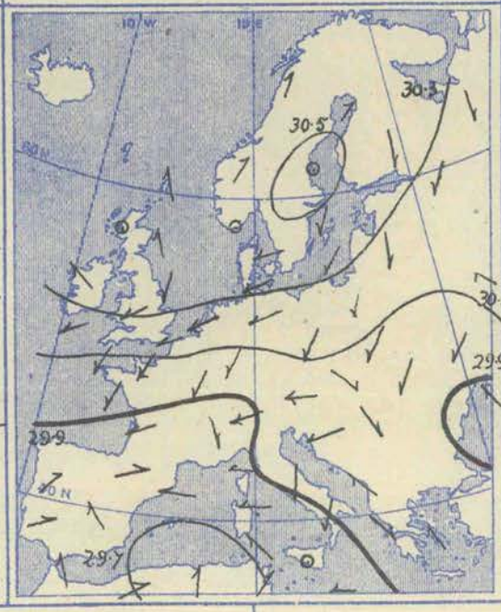
Barometer fallen generally, but risen over Ireland, Scotland, and the north of Russia. Morning readings highest, 30·4 ins. and upwards (1) in an anticyclone covering the northern half of our Islands and Norway, and (2) in the neighbourhood of the White Sea. Lowest, 29·8 ins. and less in a depression over the Crimea, and below 29·9 ins. in the extreme south-west of our area. Pressure decreasing during day except in the north of Norway and Sweden, and a small minimum appearing near Algiers.

Wednesday, 27th May, 1903.

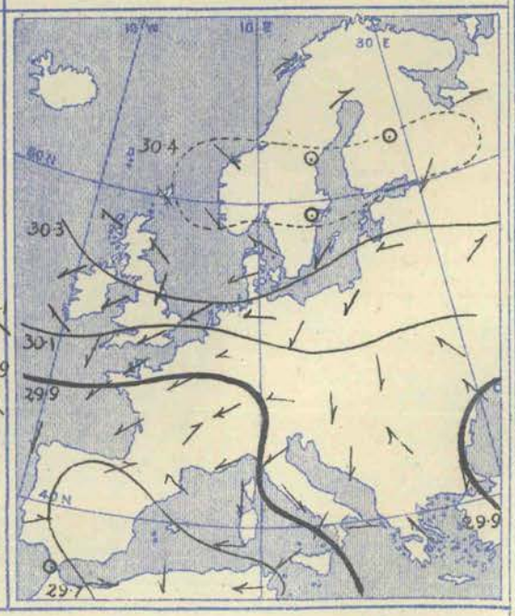
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in most regions, but cloudy or overcast in many parts of Russia, central Europe, the Spanish Peninsula, and the south-west of France. Rain falling at Riga and Berlin, and thunder prevailing at Biarritz. Continuing fine throughout the day as a whole, but rain falling at Bodö, St. Petersburg, the north of Italy, and thunderstorms occurring in the south and east of France.

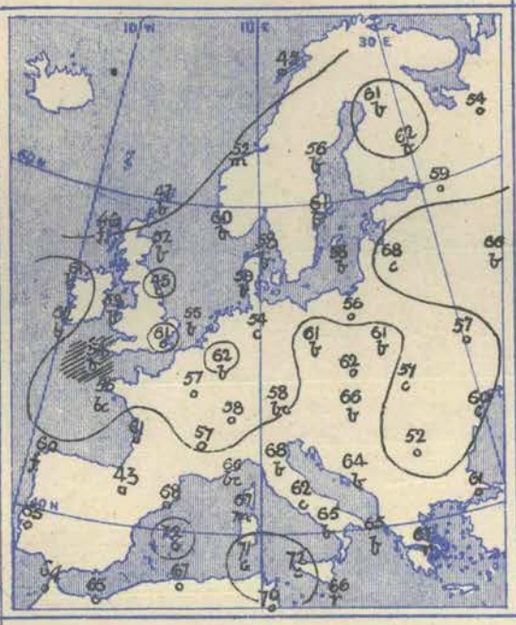
Temperature showing no decided change. Morning readings highest, 76° at La Calle, 69° at Palermo and Barcelona, 68° at Oporto, 66° at Riga, and 62° in the south of Ireland. Lowest, (1) 46° at Archangel, (2) 47° at Stornoway, 49° at North Shields, (3) 47° at Wisby, (4) 51° at Prague. Rising subsequently to 70° or a little higher over Ireland, in London, and the central parts of Europe to about 80° at several French, Italian, and Spanish stations, and to 97° at La Calle. Not exceeding 50° at the mouth of the Tyne.

Wind still anticyclonic—mainly North-Easterly—over the northern half of Europe, and fresh or strong on our south-east and east coasts and light and cyclonic or variable over the southern countries and the Mediterranean. No important change later.

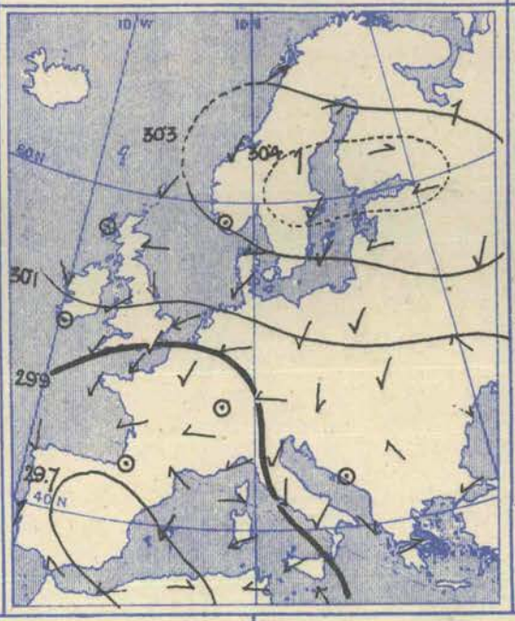
Barometer risen over Germany, Denmark, Scandinavia, Finland, and many parts of Russia, fallen elsewhere. Morning readings ranging from above 30·5 ins. in a large anticyclone with its centre over Sweden to less than 29·9 ins. over the Black Sea, and to below 29·7 ins. over Algeria and the neighbouring portion of the Mediterranean. No change in distribution later but the general level of barometer falling except over Russia and the extreme south-east of Europe.

Thursday, 28th May, 1903.

Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.

Weather at 8 a.m. fine and bright over Scandinavia, Denmark, most parts of Germany and Italy, and over the more northern districts of our Islands, but cloudy or overcast elsewhere, with rain at Clermont, Oporto, Nemours, Malta and Patras, and fog at Corunna and in the Hebrides. Thunderstorms experienced later in many parts of England, France and Spain, and rain also falling in Norway, the Netherlands, and Denmark. Largest amount of rain, 1·85 ins. at Bilbao.

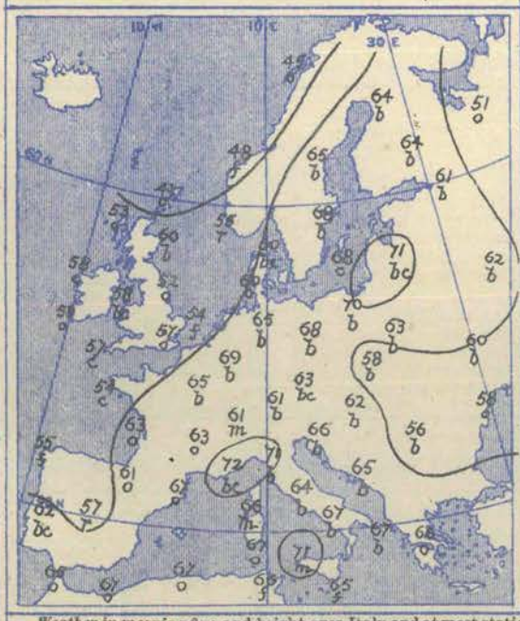
Temperature risen as a whole, but fallen in Scotland, Algeria, and Tunis. Morning readings ranging from 72° at Palma and Palermo, 71° at Cagliari, 68° at Leghorn, Barcelona and Riga, 66° at St. Petersburg, and above 60° in the south of Ireland, to 48° at Shields, 46° in the north of Scotland and to 45° at Bodö. Subsequently rising to 70° at Valencia, 72° at Parsonstown to above 75° in many parts of France and the central and southern regions generally, and to 82° at Florence, Rome, and Palermo.

Wind still anticyclonic over the northern countries, the North-Easterly wind blowing freshly at our own eastern stations, and the South-Westerly and Westerly current freshly in the north of Scandinavia. Cyclonic circulations shown both over south-western and south-eastern Europe, but of little force. Little change as a whole later, but cyclonic circulation extending more to the northward.

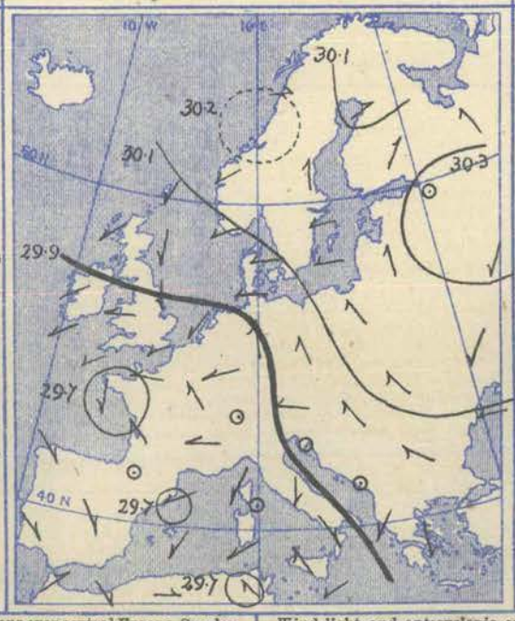
Barometer fallen over the western and north-western countries, risen in the east and south-east. Morning readings, highest, 30·3 ins. to 30·4 ins. and above in an extensive anticyclone lying over Scandinavia and the north of Russia. Lowest, 29·7 ins. and less, in an elongated depression stretching from Algeria to central Spain. As low as 29·0 ins. in another system over the Balkan Principalities. Anticyclone giving way slowly during day, and cyclonic systems becoming more clearly defined in the south.

Friday, 29th May, 1903.

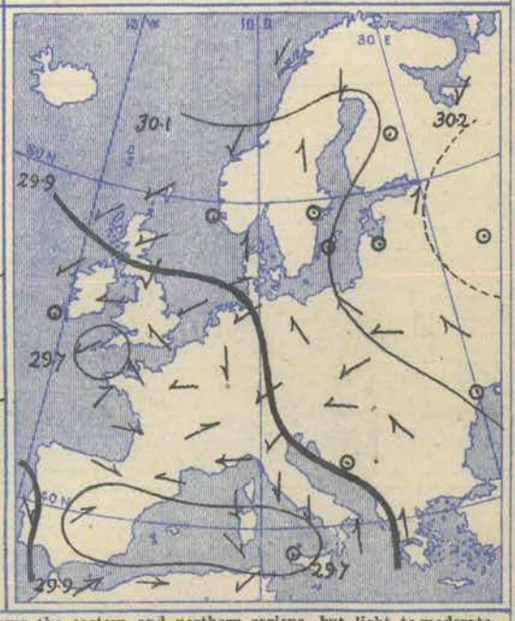
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Italy and at most stations over central Europe, Sweden, and Finland. Cloudy or overcast elsewhere, with rain in several parts of Spain, the south of England, and at Aumale and Skudesnaes. Fog prevailing at Christiansund, Yarmouth and Corunna. Rain falling later at many of our western and southern stations, in the west and north of France, some parts of Spain, and at Athens and Patras. Heaviest amount, 1·0 in. at Cherbourg. Thunderstorms occurring in many parts of France, and at a few of our own southern and south-western stations.

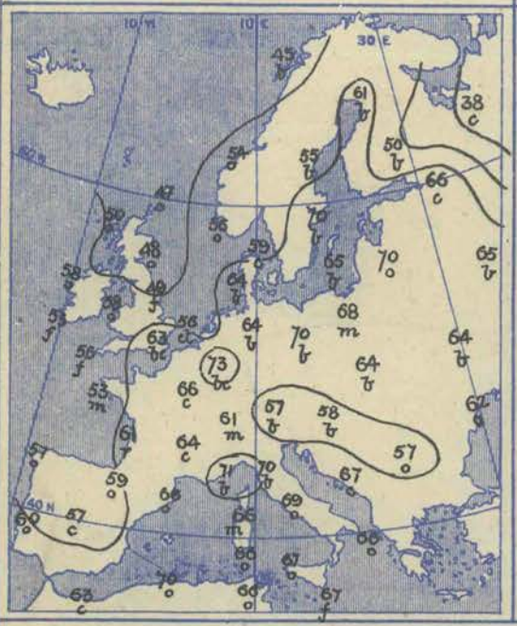
Temperature risen decidedly over North Germany and the Baltic. Readings at 8 a.m. highest, (1) 72° at Nice, 71° at Palermo, 66° over Greece, Tunis, and Trieste, (2) 72° at Memel, 68° at Stockholm, and 64° at Ulleaborg. Lowest, 45° at Bodö, 47° at Sumburgh Head, 52° at Shields and Oxford, and 55° at Portland Bill. Rising later to 72° in London, to between 70° and 80° on most parts of the Continent, and to above 80° in parts of Germany, France, and Italy. Highest readings of all, 86° at Nancy and 88° at Sanguinaires. Thermometer rising no higher than 55° at North Shields.

Wind light and anticyclonic over the eastern and northern regions, but light to moderate cyclonic circulations shown in the south-west and south. Anticyclonic current beginning to die out by evening.

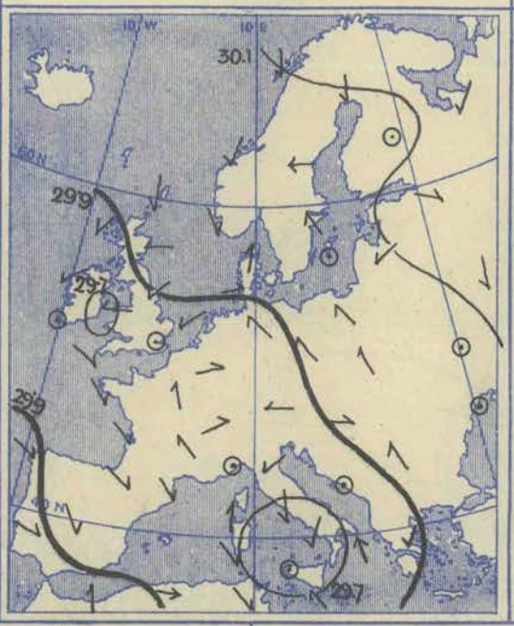
Barometer fallen except in the extreme south-west and over the south-eastern countries. Morning readings highest, 30·1 ins to 30·3 ins. and upwards, in a large area embracing the whole of Scandinavia and Russia. Lowest, 29·8 ins. to 29·7 ins. and less, in a large irregular area stretching from our southern and south-western coasts to Spain, and thence to Sicily and Tunis. No important change in distribution during day, but barometer falling in most places—more decidedly over the north of Russia than elsewhere.

Saturday, 30th May, 1903.

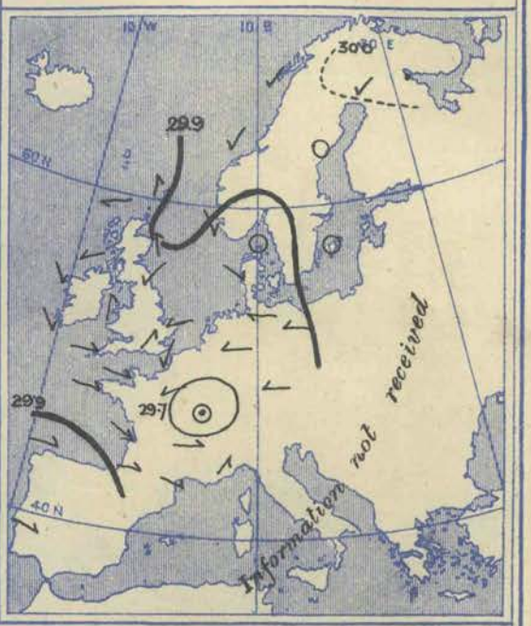
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine over central and most parts of northern Europe and also in the north of Italy. Cloudy or dull elsewhere, with rain at Athens, Rochefort, and Bilbao, showers at Malin Head, and fog at Malta and on the north-east coast of England. Thunder at Yarmouth. Rain falling later in most parts of the United Kingdom and France as well as at Lisbon and Haparanda. Violent thunderstorms occurring during day over the southern parts of England, and also at some French stations.

Temperature changed rather irregularly, but fallen in most places. Morning readings ranging from 73° at Brussels, 71° at Nice, 70° at Leghorn, Algiers, and Stockholm, and 67° at Patras, to less than 60° over our western and northern coasts, Norway, and the north of Sweden, to less than 50° at some of our own northern stations and at Bodö, and to 38° at Archangel. Rising later to 77° at Oxford, 79° in London, to 84° at Berlin and Paris, and to 86° at Brussels. Not touching 60° at several of our own stations, and rising no higher than 51° on our north-east coast.

Wind light or moderate from between South-East and North-East over eastern and northern Europe, and mainly North-Westerly over the Iberian Peninsula, and the west of France. Cyclonic circulations of light to fresh winds shown around the St. George's Channel and the south of Italy. No great change later.

Barometer fallen except over Spain and Portugal. Readings at 8 a.m. ranging from above 30·1 ins. over the greater part of Russia and above 29·9 ins. over Portugal and Morocco, to 29·7 ins. (1) in a small minimum over the south-east of Ireland, and (2) in a larger cyclonic system over Sicily and the south of Italy. Pressure decreasing over Scandinavia and the North Sea during day, but increasing over Ireland and the west of France.

IV.—GENERAL NOTES, etc.

During the whole of this period pressure was relatively high over the northern parts of our area, but while on Sunday the highest readings were above 30·5 ins., and found over the North Sea, by the end of the week they were below 30·2 ins., and had become transferred to the north-eastern portion of Europe. Shallow areas of low-pressure were shown over the south-eastern countries, and usually in the south-west also, and towards the end of the period, as the anticyclone became reduced in height, and moved away east-north-eastwards, shallow depressions from these latter regions travelled slowly northwards over the Bay of Biscay and France to England, causing a general break up of the fine dry weather which had hitherto prevailed over France and our southern districts, and violent thunderstorms in several places. The general direction of the wind was from North-East or East, but this was subject to occasional local irregularities in the northern countries, while in the south the cyclonic systems had separate circulations of little force. The temperature was not high generally, but towards the close of the week a marked upward movement set in over the inland parts of the United Kingdom, and even on the west coast of Ireland.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 122.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	48·8	+ 9·6	40	+ 8
STRATHPEFFER SPA	53·2	+13·8	45	+ 12
EDINBURGH	53·3	+16·2	46	+ 14
COCKLE PARK	68·2	—	59	—
NEWCASTLE-ON-TYNE	52·0	—	45	—
YORK	67·6	+26·4	59	+ 23
CROMER	60·2	—	53	—
LOWESTOFT	69·5	—	62	—
HOLLESLEY BAY	83·4	—	75	—
DUNMOW	73·5	—	66	—
SHEFFIELD	48·5	—	43	—
WORKSOP	55·2	+ 16·3	48	+ 14
THURCASTON	54·9	+ 13·4	49	+ 12
TUNBRIDGE WELLS	74·3	—	67	—
MARGATE	67·4	+ 23·5	61	+ 21
BROADSTAIRS	†68·9	—	†62	—
RAMSGATE	—	—	—	—
EASTBOURNE	81·4	+ 29·9	73	+ 27
BRIGHTON	81·9	+ 31·2	74	+ 28
WORTHING	78·9	—	71	—
BOGNOR	78·8†	—	71†	—
WATERGATE PARK	72·8	—	66	—
WESTBOURNE	86·1†	+35·1	78†	+ 32
VENTNOR HOSPITAL	74·1	+24·6	67	+ 22
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	68·4	+25·4	62	+ 23
SOUTHPORT	70·5	—	62	—
RHYL	68·0	—	60	—
ABERDOVEY	70·3†	—	62†	—
TENBY	—	—	—	—
TORQUAY	60·4	+ 7·9	55	+ 7
NEWQUAY	64·0	+13·1	58	+ 12
GUERNSEY	63·6†	‡ 4·3	58†	+ 4

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX. No. 14, p. 80	Aberdeen	—	—	—	—	—	—	—	—	—	0·15	- 0·33	—	—	—	—
" " "	Spurn Head	—	—	—	41·1	45·7	+ 2·2	—	3	—	—	—	—	—	—	—
" No. 16, p. 92	Yarmouth	—	—	—	—	—	—	—	—	1	0·01	- 0·37	—	—	—	—
" " "	Stonyhurst	53	—	48·8	32·5	40·3	- 5·9	19	36	—	—	—	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 22.] *Third Series.* WEEK ENDING SATURDAY, JUNE 6TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 128.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	74	32	60·2	44·2	51·7	1 above	68	+ 5	0	− 3	465*	− 9	483	− 52
	1. SCOTLAND, EAST	81	31	65·6	46·0	55·1	3 above	92	+16	0	− 2	567	− 24	499	− 84
	2. ENGLAND, N.E.	80	38	61·8	45·3	53·0	0 (average)	77	+ 1	0	− 1	649	+ 59	342	−137
	3. ENGLAND, EAST	81	39	63·3	46·9	54·5	0 (average)	88	− 5	0	− 1	880	+ 79	322	−203
	4. MIDLAND COUNTIES	82	37	67·1	46·7	56·2	2 above	99	+ 4	0	− 1	785	0	355	−180
	5. ENGLAND, SOUTH	83	39	66·5	49·9	57·7	3 above	110	+ 8	0	0	904	+ 59	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	76	39	66·9	46·9	56·2	3 above	99	+16	0	− 1	660*	+ 13	317	− 96
	7. ENGLAND, N.W.	78	38	63·1	48·6	55·4	1 above	94	+ 3	0	− 1	735	+ 51	259	−129
	8. ENGLAND, S.W.	76	39	66·3	50·1	57·7	3 above	110	+15	0	0	918	+ 97	162	−138
	9. IRELAND, NORTH	71	36	59·4	47·0	52·8	0 (average)	76	− 9	0	− 1	673	− 53	286	− 61
	10. IRELAND, SOUTH	74	38	64·8	47·9	55·8	1 above	97	+ 4	0	0	898	+ 22	183	− 67
	— CHANNEL ISLANDS	69	49	60·4	52·1	55·9	0 (average)	97	− 4	0	0	1086	+117	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 128.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	3	3 less	109	+16	30·5	+11·5	33	− 5	27	− 4	422	− 96	23	− 5
	1. SCOTLAND, EAST	2	3	2 less	92	+13	15·9	+ 4·6	51	+11	43	+ 9	489	− 77	26	− 4
	2. ENGLAND, N.E.	1	1	3 less	77	+ 3	9·1	+ 0·2	51	+ 9	43	+ 8	527	− 55	28	− 3
	3. ENGLAND, EAST	0	less than half	4 less	69	− 6	8·2	− 0·3	55	+11	48	+10	642	− 11	35	− 1
	4. MIDLAND COUNTIES	0	less than half	5 less	76	+ 4	12·5	+ 2·3	58	+18	50	+16	537	− 25	29	− 1
	5. ENGLAND, SOUTH	1	1	4 less	79	+ 9	11·9	+ 1·7	56	+ 9	50	+ 8	656	− 1	35	0
Principal Grazing Districts.	6. SCOTLAND, WEST	1	1	6 less	104	+22	27·4	+ 8·7	72	+30	61	+25	528	− 60	28	− 3
	7. ENGLAND, N.W.	1	1	5 less	94	+17	15·8	+ 4·0	68	+24	59	+21	584	+ 2	31	0
	8. ENGLAND, S.W.	0	less than half	5 less	90	+11	17·9	+ 3·3	66	+17	59	+15	631	− 59	34	− 3
	9. IRELAND, NORTH	1	less than half	6 less	110	+17	18·5	+ 5·4	43	+ 3	37	+ 2	481	− 92	26	− 5
	10. IRELAND, SOUTH	0	less than half	6 less	100	+16	19·6	+ 3·9	59	+14	51	+12	560	− 83	30	− 5
	— CHANNEL ISLANDS	2	less than half	4 less	94	+11	12·4	+ 0·4	58	0	52	0	753	− 30	41	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather. The conditions during this week were mostly very fair and dry, but thunderstorms were experienced at several English stations on Sunday or Monday, and again in isolated localities towards its close.

Temperature, after being very high for a time over England, fell very decidedly, and in many places became low for the time of year. The average values for the week were just equal to the mean in England N.E. and E., Ireland N., and the Channel Islands, but above it elsewhere. The highest of the maxima, which were registered on Sunday or Monday in England, and later in the week in Scotland and Ireland, were as high as 83° in England S., 82° in the Midland Counties, and 81° or 80° over the east and north-east of Great Britain. Elsewhere they ranged from 78° in England N.W. to 71° in Ireland N., and to 69° in the Channel Islands. The lowest of the minima were recorded during the middle of the week, when the thermometer fell to 31° in Scotland E., 32° in Scotland N., and to 39° or below in all other districts except the Channel Islands.

Rainfall was less than the mean throughout the Kingdom. In many parts of England and the south of Ireland the weather was quite rainless.

Bright Sunshine was very abundant over the country generally, but was deficient in Scotland N. The percentage of the possible duration ranged from 61 in Scotland W., 59 in England N.W. and S.W., 52 in the Channel Islands, and 50 over southern and central England, to 37 in Ireland N., and to 27 in Scotland N.

Barometer and Wind. Soon after the beginning of the week, a large anticyclone began to spread over the United Kingdom from the westward, the system gradually embracing the whole of north-western Europe. The winds, which were at first light and variable, consequently shifted to the Westward in the far north, and to the Northward or North-Eastward over the country as a whole; they were of little strength generally, but fresh or strong breezes were felt at times over the southern and south-eastern counties. The only depression to appear within our immediate neighbourhood was a small system which formed over the south of Scotland and the north-east of England during the night of Thursday; it produced local variations in the wind direction, and also some smart falls of rain.

317 | 90 Wy. & S. Ltd.
209 | 70 12 | 02

II.—DATA from which the SUMMARY on page 127 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°.	Below 42°.							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	53	39	50·7	43·4	46·8	− 0·9	34	0	3	0·23	− 0·20	*	*	*	*
	Stornoway	62	37	57·1	42·7	49·4	− 0·6	52	0	5	0·36	− 0·20	20 5	− 22·0	17	− 18
	Wick	64	35	59·0	42·7	50·3	+ 0·3	58	0	2	0·31	− 0·09	*	*	*	*
	Lairg Ⓢ	74	32	68·1	44·3	55·4	+ 5·0	94	0	2	0·20	− 0·30	*	*	*	*
	Glencarron Ⓢ	69	35	60·0	44·3	51·6	+ 0·4	67	0	3	0·40	− 0·72	*	*	*	*
	Fort Augustus Ⓢ	70	34	64·5	44·8	54·0	+ 1·7	84	0	1	0·37	− 0·11	38·6	+ 8·4	32	+ 7
	Fort William	67	39	62·3	46·9	54·1	+ 1·4	85	0	1	0·41	− 0·46	42·9	+ 2·4	36	+ 2
1. SCOTLAND, E.	Nairn	71	33	63·9	45·3	54·0	+ 1·7	84	0	4	0·48	+ 0·08	*	*	*	*
	Aberdeen	66	37	58·9	45·4	51·7	+ 0·3	68	0	3	0·33	− 0·10	49·1	+ 5·6	41	+ 5
	Braemar Ⓢ	73	31	66·7	44·3	54·7	+ 5·4	89	0	2	0·31	− 0·19	*	*	*	*
	Ochtertyre Ⓢ	80	38	70·6	46·0	57·4	+ 4·4	108	0	1	0·28	− 0·32	*	*	*	*
	Leith Ⓢ	81	46	67·1	48·7	57·3	+ 4·1	107	0	1	0·37	− 0·03	*	*	*	*
	Marchmont Ⓢ	74	40	66·4	46·3	55·7	+ 4·7	96	0	1	0·25	− 0·31	51·0	+ 9·6	43	+ 8
2. ENGLAND, N.E.	Alnwick Castle	70	41	62·9	45·4	53·5	+ 2·5	81		2	0·34	− 0·11	*	*	*	*
	Durham	72	39	63·4	44·3	53·2	+ 0·4	78	0	1	0·19	− 0·25	43·5	+ 4·5	37	+ 4
	Shields	66	41	58·0	46·0	51·6	− 0·4	67	0	1	0·27	− 0·13	*	*	*	*
	Scarborough Ⓡ	66	40	59·4	44·4	51·4	− 1·4	66	0	0	0·00	− 0·45	38·3	—	33	—
	Spurn Head	65	46	58·4	46·9	52·3	− 0·9	72	0	0	0·00	− 0·35	*	*	*	*
	Fulbeck (Lincolnshire)	80	38	68·8	44·9	56·0	+ 1·3	98	0	1	0·02	− 0·42	64·4	—	56	—
3. ENGLAND, E.	Hillington Ⓡ	79	42	64·8	46·7	55·1	+ 0·9	92	0	1	0·05	− 0·41	54·6	+ 8·6	48	+ 8
	Yarmouth	66	47	58·6	48·9	53·4	0·0	80	0	0	0·00	− 0·42	*	*	*	*
	Geldeston	76	41	61·8	46·1	53·4	− 0·7	80	0	0	0·00	− 0·40	46·8	− 2·4	41	− 2
	Cambridge	81	39	67·3	44·9	55·3	− 0·1	93	0	0	0·00	− 0·45	65·7	+ 19·8	58	+ 17
	Felixstowe	71	41	61·6	47·7	54·2	+ 0·8	85	0	0	0·00	—	58·2†	—	51†	—
	Rothamsted	78	41	65·3	45·9	54·9	+ 0·7	90	0	0	0·00	− 0·47	63·4	+ 19·1	56	+ 17
	Shoeburyness	75	42	63·7	48·0	55·3	+ 1·2	93	0	0	0·00	− 0·33	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	74	40	66·5	45·5	55·3	+ 3·2	93	0	1	0·05	− 0·52	62·8	—	54	—
	Bawtry (Hesley Hall)	77	38	69·0	46·0	56·7	+ 2·6	103	0	0	0·00	− 0·47	*	*	*	*
	Loughborough	78	37	68·3	45·8	56·3	+ 1·9	100	0	1	0·02	− 0·45	*	*	*	*
	Colly Weston (Stamford)	82	40	71·1	45·3	57·3	+ 2·3	107	0	0	0·00	− 0·44	*	*	*	*
	Cheadle Ⓡ	76	41	64·3	47·5	55·3	+ 2·6	93	0	1	0·09	− 0·52	*	*	*	*
	Birmingham (Edgbaston)	75	42	64·8	48·6	56·1	+ 2·1	99	0	0	0·00	− 0·56	41·1	—	36	—
	Churchstoke Ⓡ	75	40	67·0	45·9	55·7	+ 2·7	96	0	0	0·00	− 0·50	61·4	+ 16·9	54	+ 15
	Hereford Ⓡ	75	40	67·2	46·9	56·3	+ 1·9	100	0	0	0·00	− 0·47	*	*	*	*
	Cirencester	73	41	65·8	47·1	55·8	+ 1·7	97	0	0	0·00	− 0·49	64·3	+ 18·2	57	+ 16
	Oxford	76	40	67·1	48·4	57·1	+ 1·5	106	0	0	0·00	− 0·45	62·5	+ 17·5	55	+ 16
5 ENGLAND, S.	London	83	40	69·3	48·6	58·2	+ 1·4	113	0	0	0·00	− 0·42	60·8‡	+ 19·3‡	54‡	+ 17‡
	Swarraton (Alresford) Ⓡ	77	39	66·4	48·0	56·6	+ 2·9	102	0	0	0·00	− 0·45	*	*	*	*
	Dungeness	69	49	60·6	51·4	55·7	+ 0·6	96	0	2	0·06	− 0·24	49·1	—	44	—
	Hastings (St. Leonards)	77	45	63·9	49·8	56·4	+ 1·3	101	0	2	0·32	− 0·05	55·3	+ 2·3	49	+ 2
	Southampton	83	42	71·1	51·9	60·8	+ 3·9	132	0	0	0·00	− 0·43	61·4	+ 11·9	55	+ 11
	Portland Bill	78	43	67·0	50·7	58·3	+ 3·6	114	0	0	0·00	—	*	*	*	*
	Shaftesbury Ⓡ	75	40	67·3	49·1	57·6	+ 3·7	109	0	0	0·00	− 0·50	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	72	39	62·4	46·2	53·7	+ 0·4	82	0	2	0·18	− 0·73	*	*	*	*
	Glasgow	74	43	66·1	47·8	56·3	+ 3·3	100	0	1	0·19	− 0·41	62·7	+ 25·7	53	+ 22
	Cally Ⓢ	76	41	73·2	46·6	59·0	+ 6·3	119	0	1	0·08	− 0·62	*	*	*	*
	Aspatria	71	39	67·3	46·8	56·3	+ 3·9	100	0	2	0·07	—	68·8	—	59	—
	Douglas (Isle of Man)	71	42	65·5	47·3	55·8	+ 2·9	97	0	0	0·00	− 0·52	85·3	+ 34·3	73	+ 29
7. ENGLAND, N.W	Newton Rigg	76	38	69·3	44·9	56·3	+ 4·5	100	0	2	0·18	—	68·0	—	58	—
	Stonyhurst	76	43	66·4	48·1	56·6	+ 3·0	102	0	2	0·29	− 0·39	64·3	+ 19·8	55	+ 17
	Blackpool Ⓡ	65	41	61·7	47·6	54·2	0·0	85	0	0	0·00	− 0·47	75·1	+ 30·2	65	+ 26
	Manchester (Prestwich)	78	43	67·0	48·0	56·8	+ 3·2	104	0	1	0·07	− 0·55	55·0	—	47	—
	Liverpool Obsy. (Bidston)	64	47	60·3	50·4	55·0	0·0	91	0	0	0·00	− 0·45	59·6	—	51	—
	Chester (Hawarden Bridge)	65	47	62·6	51·7	56·8	+ 1·3	104	0	0	0·00	—	*	*	*	*
	Llandudno Ⓡ	64	46	61·3	49·9	55·2	+ 0·3	92	0	0	0·00	− 0·43	67·8	+ 21·8	59	+ 19
	Holyhead	59	46	56·4	48·3	52·1	− 2·1	71	0	0	0·00	− 0·44	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	64	47	61·0	49·6	54·9	+ 1·3	90	0	0	0·00	− 0·44	70·7	+ 17·9	63	+ 16
	Clifton	75	45	68·7	50·6	59·0	+ 4·0	119	0	0	0·00	− 0·51	*	*	*	*
	Bath	75	39	68·1	47·9	57·3	+ 1·5	107	0	0	0·00	− 0·50	60·3	—	53	—
	Arlington (N. Devon)	72	42	66·0	48·9	56·9	+ 3·5	104	0	0	0·00	− 0·68	*	*	*	*
	Cullompton Ⓡ	76	42	69·1	50·0	58·9	+ 3·4	118	0	0	0·00	− 0·51	66·7	+ 20·2	60	+ 18
	Falmouth	69	47	62·9	51·7	56·9	+ 1·6	104	0	1	0·02	− 0·54	66·0	+ 12·2	59	+ 11
	Plymouth	72	49	68·3	52·2	59·7	+ 3·4	124	0	0	0·00	− 0·46	67·4	+ 17·4	60	+ 16
9. IRELAND, N.	Malin Head	59	41	55·6	47·6	51·3	− 1·2	65	0	3	0·04	− 0·46	*	*	*	*
	Edenfel (Omagh)	70	39	62·6	45·7	53·6	+ 1·0	81	0	0	0·00	− 0·61	*	*	*	*
	Blacksod Point	64	46	58·4	49·7	53·8	+ 0·1	83	0	2	0·02	− 0·61	*	*	*	*
	Markree Castle	69	36	60·1	46·4	52·8	+ 0·1	76	0	0	0·00	− 0·68	45·2	+ 4·8	39	+ 4
	Armagh	71	37	63·5	45·1	53·7	+ 0·3	82	0	0	0·00	− 0·53	41·3	+ 0·6	35	+ 1
	Donaghadee	58	46	56·3	47·4	51·5	+ 1·7	67	0	0	0·00	− 0·50	*	*	*	*
10. IRELAND, S.	Dublin	71	44	64·7	49·8	56·7	+ 1·4	103	0	0	0·00	− 0·45	53·6	+ 7·0	47	+ 6
	Birr Castle	70	38	64·0	43·7	53·1	− 1·1	78	0	0	0·00	− 0·54	53·6	+ 13·1	47	+ 11
	Kilkenny	71	40	65·4	46·9	55·5	+ 1·1	95	0	0	0·00	− 0·53	*	*	*	*
	Waterford	72	43	66·7	47·6	56·5	+ 2·5	102	0	0	0·00	− 0·57	*	*	*	*
	Roche's Point	68	45	64·1	49·7	56·4	+ 1·0	101	0	0	0·00	− 0·70	*	*	*	*
	Valencia	70	46	63·1	49·4	55·8	+ 1·2	97	0	0	0·00	− 0·77	69·3	+ 22·6	61	+ 20
	Killarney	74	42	65·4	48·0	56·1	+ 1·9	99	0	1	0·19	− 0·47	*	*	*	*
	Foynes	73	42	64·9	48·2	56·0	+ 1·8	98	0	0	0·00	− 0·57	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	50	58·7	52·0	55·1	− 0·2	92	0	1	0·01	− 0·40	71·8	+ 15·4	65	+ 14
	Jersey	69	49	62·0	52·1	56·7	+ 0·2	103	0	2	0·07	− 0·36	47·7	− 9·1	43	− 8

Stations Marked Ⓡ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

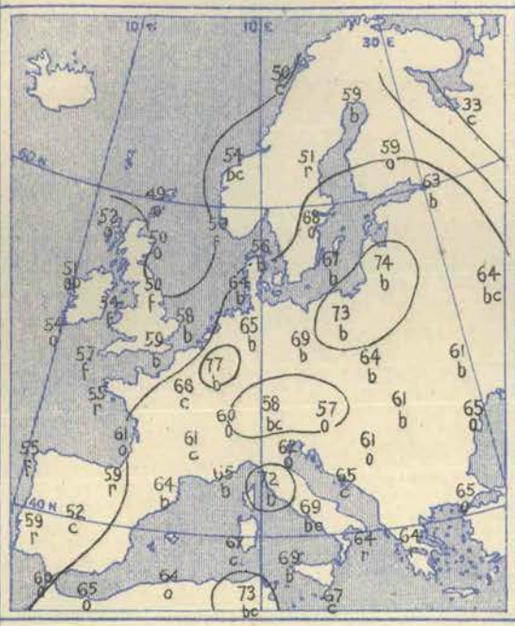
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

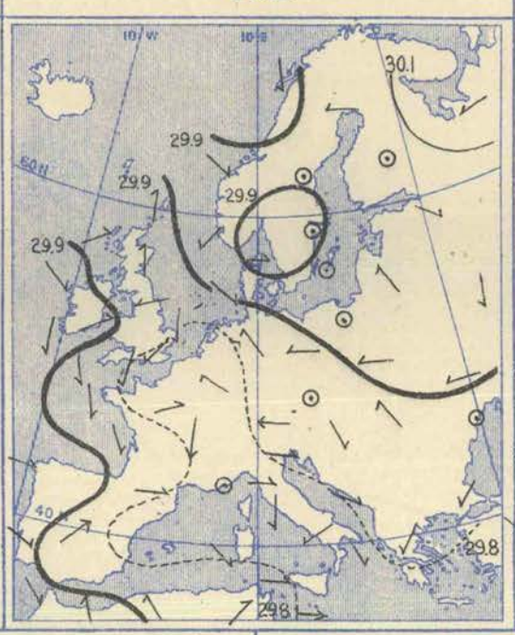
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 31st May, 1903.

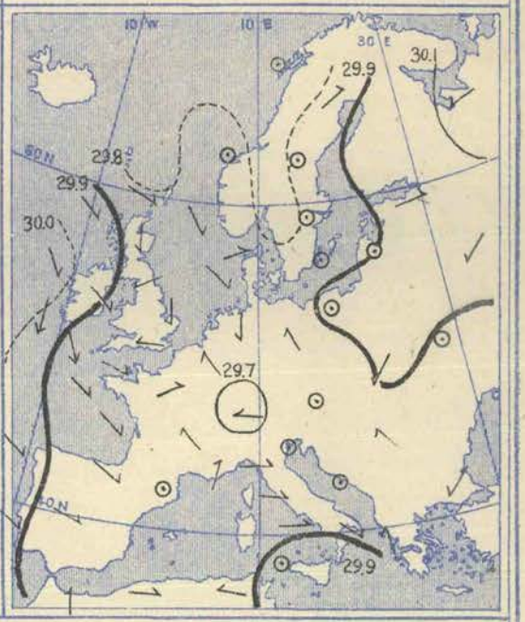
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the Netherlands, Denmark, the Baltic, the south-east of England, and in some parts of Italy, but cloudy or overcast as a whole, and foggy at Corunna, in the north-east of England, and at Malin Head. Rain falling at Hernösand, Turin, Athens, Biarritz, and Lisbon, and showers at Blacksod. Heavy rain experienced later over the north of Italy and the Adriatic—as much as 2·36 ins. at Pesaro, and thunderstorms occurring at Paris, Jersey, and Dungeness.

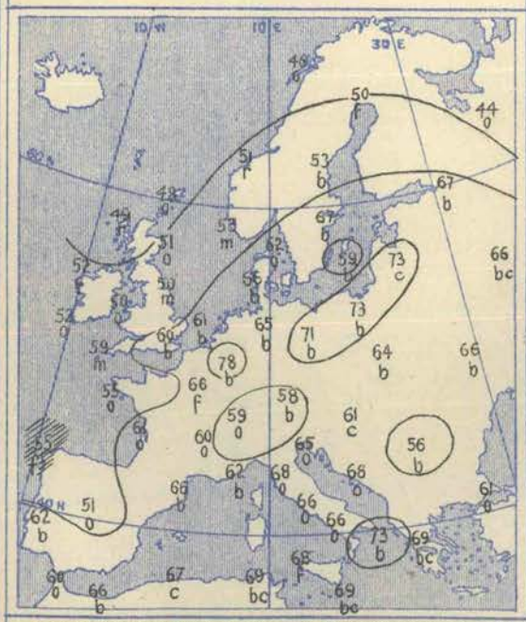
Temperature changed irregularly. Morning readings ranging from 77° at Brussels, 74° to 70° over North Germany, 73° at La Calle, 72° at Leghorn, and 68° at Barcelona, to 52° at Madrid, 50° or 49° on our own north-east coast, 50° at Bodö, and to 33° at Archangel. Only rising to 53° at Shields during day, but touching 70° at Nairn, 78° in London, and 80° or above at many stations on the Continent. Highest readings, 86° at Utrecht, and 87° at Charleville (north-east of France).

Wind light and variable as a whole, but showing general tendency to circulate cyclonically. No decided change later.

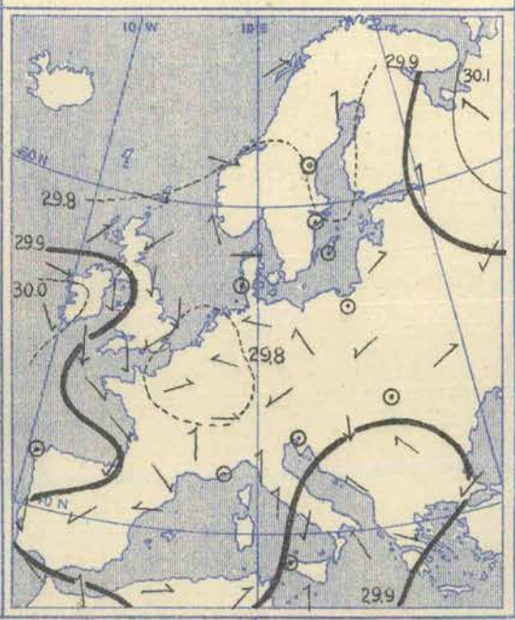
Barometer fallen in most regions, but risen over Italy, England, and Ireland. Readings at 8 a.m. very irregular; highest, above 30·1 ins. over the White Sea, and about 30·0 ins. off the west of Ireland. Lowest, 29·8 ins. and less in a large irregularly shaped area covering the greater part of France, Italy, Greece, and the major portion of the Mediterranean. Below 29·9 ins. in other systems over Scandinavia. Barometric pressure distribution continuing very complex, and gradients very slight all day.

Monday, 1st June, 1903.

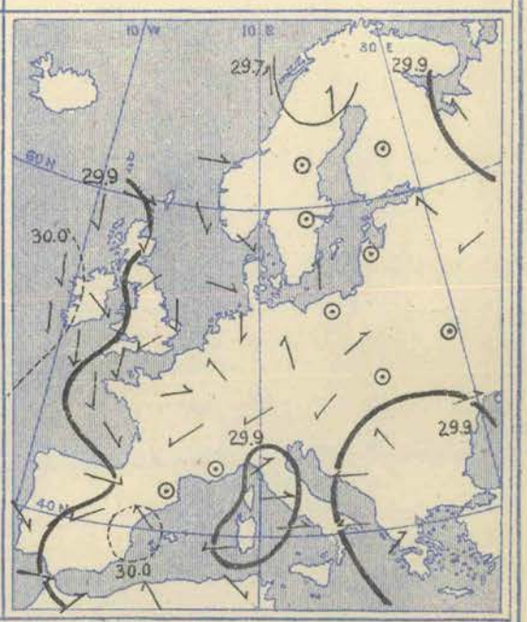
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over Sweden, Denmark, North Germany, the Netherlands, and the south-east of England; cloudy or dull in nearly all other regions, with fog at Spurn Head, Corunna, Prague and Palermo, and rain at Stornoway, Vienna, Turin, and Bilbao. Rain experienced later in some parts of our Islands, the Netherlands, and the southern and eastern parts of France, over Italy, Algeria, and the south of Russia. Thunderstorms occurring over the south of France and at Dungeness. Largest rainfall, 3·47 ins. at Nice, but 1·5 ins. at Nicolaieff, and 1·0 in. at Turin.

Temperature highest, 78° at Brussels, 73° on the north-east coast of Germany and at Brindisi, 68° at Barcelona and Leghorn, 67° at Stockholm and St. Petersburg, and 63° on the south coast of England. Lowest, 44° at Archangel, 46° at Bodö, 48° at Sumburgh Head and Spurn Head, 51° at Liverpool and Madrid, and 52° on the west coast of Ireland. Rising during day to 76° at Oxford, 78° at Stockholm, 83° in London, 86° at Brussels, and to 88° at Utrecht. Maxima between 70° and 80° over Europe generally, but not touching 60° at several of our own northern and western stations.

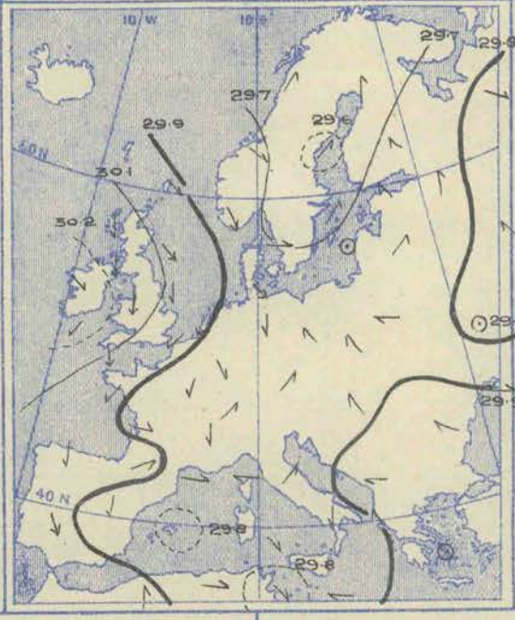
Wind at 8 a.m. showing light cyclonic circulations over the western countries, and mainly light and variable elsewhere. No great or general change during day.

Barometer at 8 a.m. ranging from above 30·1 ins. in the north of Russia, and above 30·0 ins. in the west of Ireland, to below 29·8 ins. (1) in a shallow area stretching from Madrid to Sardinia, and (2) in another area embracing the Netherlands and the adjacent parts of France and Germany. Changing rather irregularly later as a whole, but a general rise of barometer taking place in Ireland and Scotland, and highest readings becoming transferred to that region. Pressure decreasing over northern Russia.

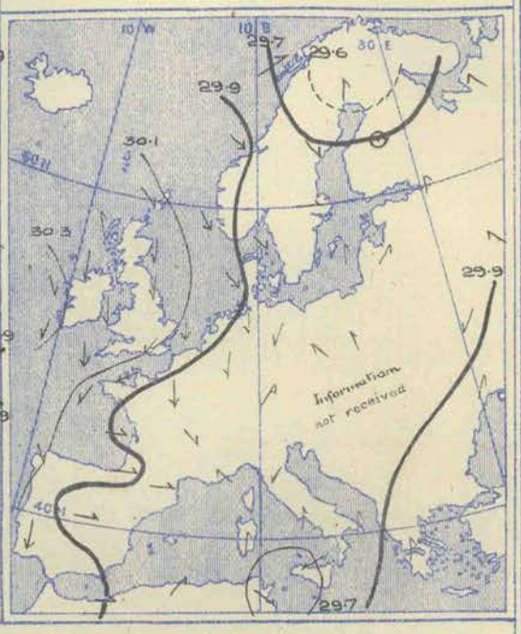
Tuesday, 2nd June, 1903.

Temperature and Weather. 8 a.m.

Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in different parts of Russia, and on the shores of the Gulf of Bothnia and the Baltic. Cloudy or overcast in nearly all other places, with rain along the west coast of Norway, at Nairn, in the south of France, and at Cracow, and thunder at Cuxhaven and Nice. Fog still prevailing at Corunna. Rain falling in most countries during day, but weather continuing dry in Italy, Russia, Greece, the Netherlands, and at most of our own stations. Rainfall, 1·1 ins. at Clermont, and 1·5 ins. at Frankfürt and Algiers.

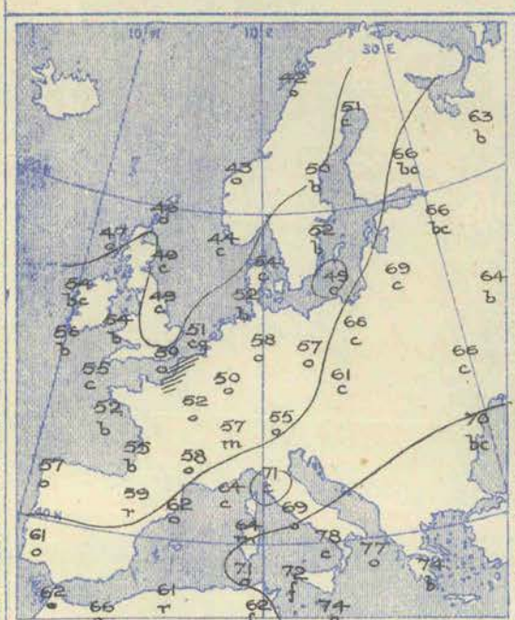
Temperature at 8 a.m. highest, 74° at Memel, 72° at Naples, 69° in Greece, 65° at Paris, and 63° at Lisbon. Lowest, 46° or 47° in the extreme north of Scotland and Scandinavia, 51° or 52° in the west of Ireland, 54° at Madrid, and 55° at Limoges and Nice. Maxima during day low over our Islands, but between 75° and 82° over the central and southern regions of the Continent, and as high as 81° at Stockholm.

Wind moderate to strong from North-West to North-East over our Islands, and the western part of the Continent. Light and rather variable or South-Easterly in the eastern countries. Light and mainly cyclonic over the Mediterranean. No decided change later.

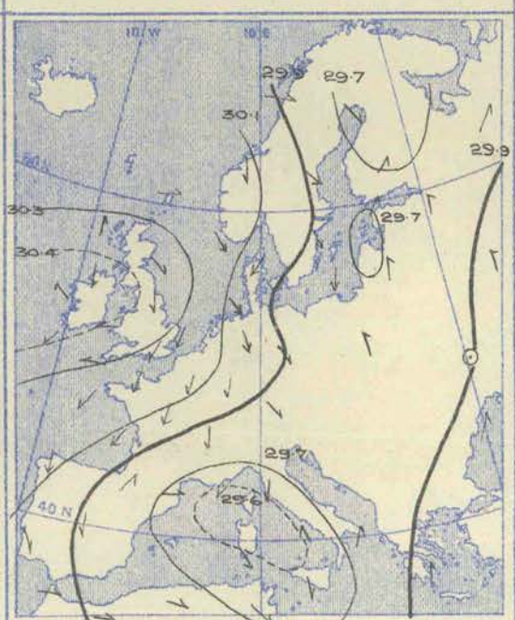
Barometer risen in these Islands, France, and Spain, fallen in most other regions. Readings in morning ranging from 30·2 ins. and upwards in the eastern edge of an anticyclone over Ireland, to 29·6 ins. and less in a depression over central Sweden. Relatively low in the Mediterranean and over Tunis. Anticyclone spreading eastwards over our Islands during day, and Swedish disturbance moving northwards to Lapland. Gradients increasing and becoming rather steep over the north of France.

Wednesday, 3rd June, 1903.

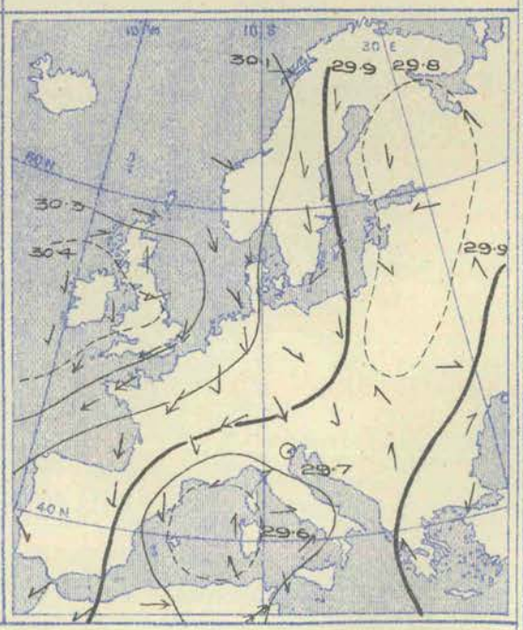
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or overcast generally, but fine in Ireland, Greece, and the north of Russia. Rain falling at Biarritz, and at some Spanish and Algerian stations. Considerable amounts of rain later over the south of France, at a few German and Russian stations, and over Austria-Hungary, and heavy falls over Italy—about 1·6 ins. at Florence and Naples.

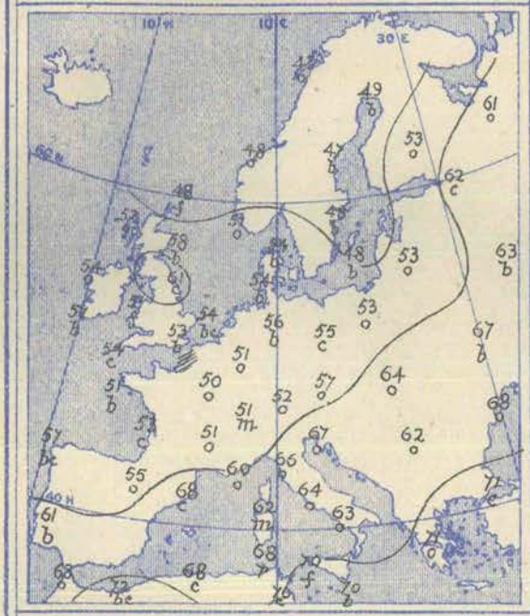
Temperature risen over the Mediterranean district, fallen decidedly over northern and central Europe. Morning readings highest, 78° at Naples, 77° at Brindisi, 74° at Patras and Malta, 70° at Odessa, 69° at Riga, 66° Kuopio, and 63° at Archangel. Lowest, 42° to 44° along the west coast of Norway, 49° at Wisby, Aberdeen, and Shields, and 50° in London. Maxima again very low over these Islands, and rather low over all the northern countries, but thermometer rising to 84° at Patras and Buda-Pesth, and to 83° at Naples.

Wind Westerly in the north of Scotland, drawing into North or North-East over England and France, fresh or strong over the English Channel. A cyclonic disturbance of no great force shown over the western portion of the Mediterranean. Moderate to strong Northerly or North-Westerly winds over Scandinavia, and light Southerly airs over Russia. Not much modification later, but strength of wind increasing in various parts of the Mediterranean.

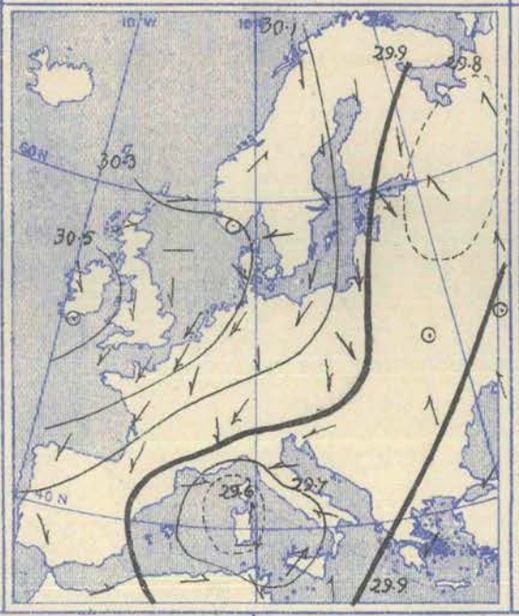
Barometer fallen over Italy and its neighbourhood, and also over Finland, risen elsewhere—most in Norway. Readings at 8 a.m. ranging from 30·4 ins. over Ireland, to below 29·7 ins. in an elongated disturbance extending from Poland to Lapland, and to less than 29·6 ins. in another depression extending from Sicily to the Riviera. Anticyclone continuing to move eastwards during day and the elongated disturbance travelling slowly eastwards over Russia. No important change elsewhere.

Thursday, 4th June, 1903.

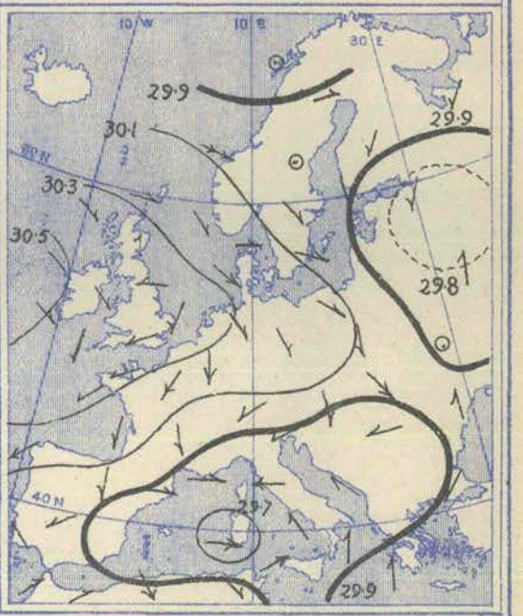
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in Sweden, Denmark, at most of our own stations, and in Portugal, but cloudy or dull as a whole. Rainy in the south of Austria, at Turin, Bilbao and Cagliari, and foggy at Palermo and on some parts of the British coasts. Rain falling later at a few of our own northern and north-western stations, and in most parts of Austria, Norway, Russia and Italy—1·26 ins. at Rome—and thunder experienced at Bodö.

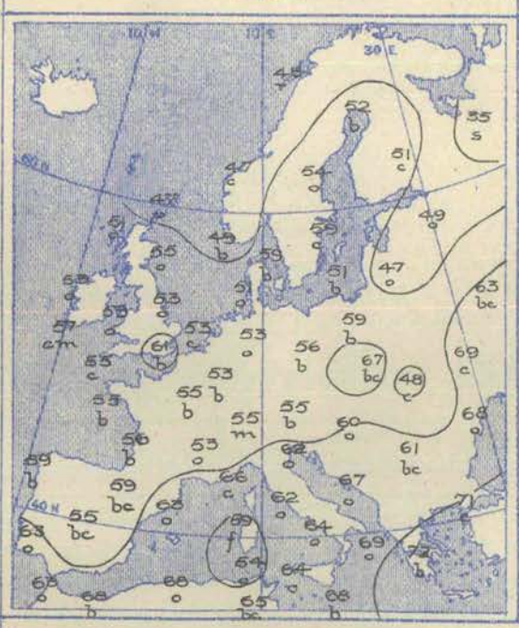
Temperature risen over our Islands, and Norway, fallen generally elsewhere. Readings in morning highest, 72° at Oran, 71° at Patras and Constantinople, 70° at Malta, 69° at Nicolaïeff, 67° at Trieste, 65° at Leith, and 61° at Archangel. Lowest, 43° at Bodö, 47° at Limoges, 48° at Wisby and Sumburgh Head, 50° at Paris, and 52° at Munich. Rising during day to 70° at Parsonstown, to 81° at Leith, to between 70° and 80° over most of the southern regions of the Continent, and to 89° at Constantinople. Not exceeding 59° at Biarritz, and 57° at Limoges.

Wind in morning anticyclonic over north-western and western Europe, the North-Easterly current over France and our southern coasts blowing strongly. Two cyclonic circulations prevailing—one over the western part of the Mediterranean with strong Westerly and South-Westerly winds, and the other over north-west Russia, with strong North-Westerly winds. Not much change later as a whole, but a Westerly gale setting in at Christiansund.

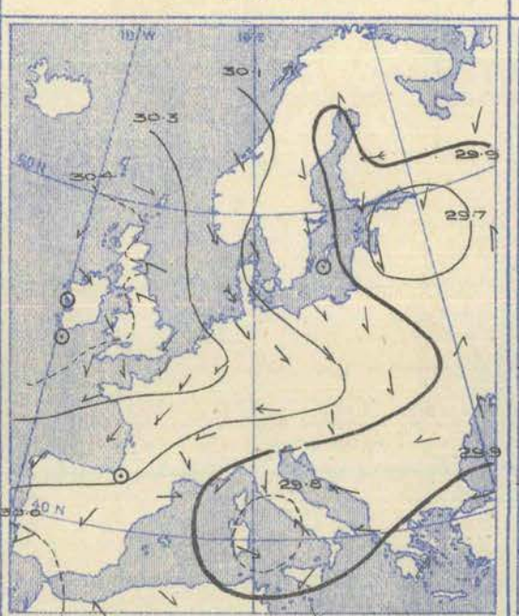
Barometer risen except in Russia. Morning readings ranging from 30·5 ins. to 30·3 ins. in an anticyclone stretching from the Atlantic over our Islands and the North Sea, to below 29·8 ins. in an elongated depression extending from Riga to the White Sea, and to less than 29·6 ins. in another system over Corsica and Sardinia. Depressions moving eastwards later, and a fresh one appearing in the north of Norway and Lapland. A small system beginning to form on our own north-east coasts.

Friday, 5th June, 1903.

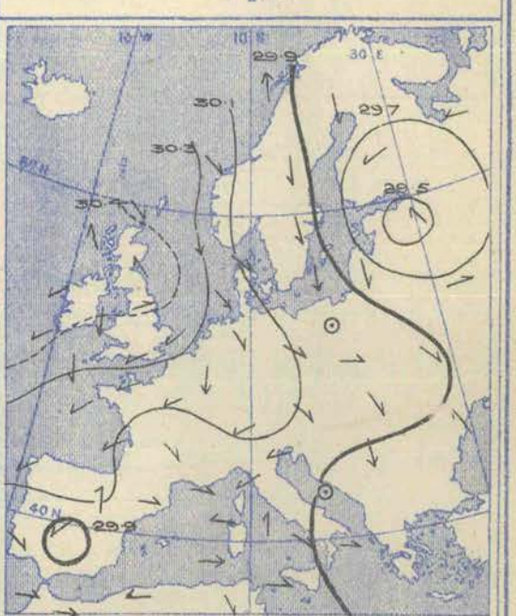
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine over Greece, the south of England, many parts of France and central Europe and at some Spanish stations. Cloudy or dull in nearly all other regions, with rain at Leith and Wick, Bodö, Karlstad, and over the north of Italy, and snow at Archangel. Rain falling later at several Russian and Italian stations, as well as at Neu-Fahrwasser and Hermanstadt—heaviest amounts 1·5 ins. at the latter station and 1·1 ins. at Helsingfors.

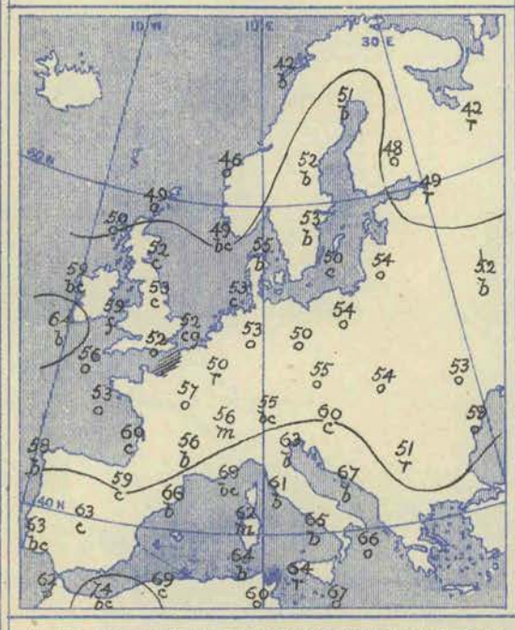
Temperature fallen quickly in some districts, risen decidedly in others. Morning readings highest, 72° in Greece, 69° at Leghorn, Brindisi, and Kiev, 63° at St. Petersburg and Bath, and 62° at Leith. Lowest, 35° at Archangel, 47° at Christiansund and Sumburgh Head, 48° at Lemberg, 50° at Spurn Head and Cracow, 53° at Lyons, 54° at Cagliari, and 55° at Madrid. Rising to 70° in London later, to a rather higher value in most southern and central parts of the Continent, and to 90° at Biskra.

Wind in morning showing two cyclonic movements—one over Russia, and the other over southern Europe and the Mediterranean. Not strong in force generally, but the North-Westerly wind over Denmark blowing a fresh gale, and the West-North-Westerly wind blowing strongly in Sardinia and Tunis. North-Westerly to North-Easterly (anticyclonic) over our Islands and their neighbourhood, and variable on our north-east coast. Mediterranean cyclonic circulation becoming less well marked by evening, but a fresh one setting in over the Iberian Peninsula.

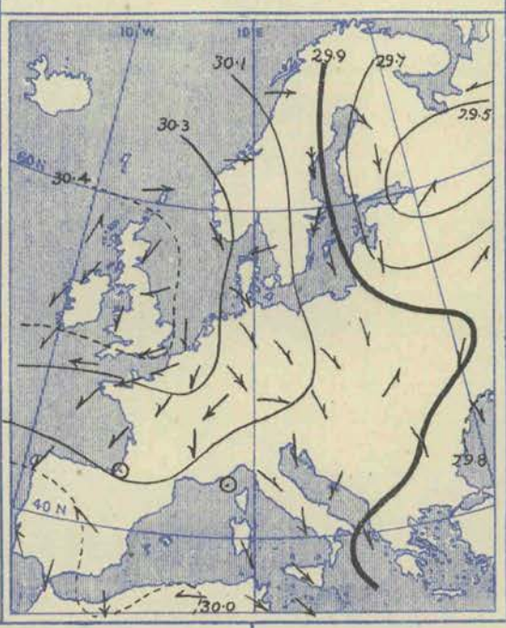
Barometer risen over southern and central Europe, fallen elsewhere. Morning readings still ranging from 30·5 ins. to 30·3 ins. in an anticyclone embracing the British Isles and the greater portion of the North Sea, to 29·8 ins. and less in a depression of decreasing intensity over Sardinia, Corsica, and the adjacent part of Italy, and to below 29·7 ins. in another system over Russia. Latter becoming rather deeper later, but the former continuing to fill up. A new depression forming over central Spain.

Saturday, 6th June, 1903.

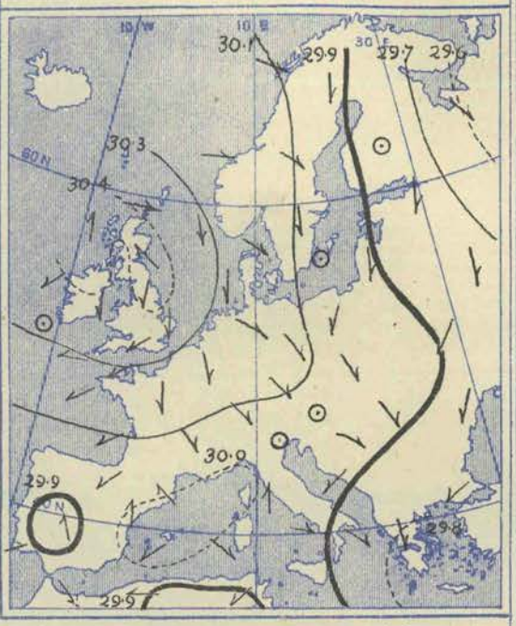
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. varying greatly in different localities, being almost cloudless in some places, and dull and even rainy in others. Thunder reported at Cape Gris Nez. A little rain experienced during the ensuing twenty-four hours in different parts of Russia and Austria-Hungary, but weather remaining dry as a whole.

Temperature changed very irregularly. Morning readings highest, 74° at Oran, 70° at Cape Sicié, 69° at Oporto, 67° at Lésina and Malta, 66° at Nicolaïeff, Brindisi, and Florence. Lowest, 42° at Bodö and Archangel, 49° at St. Petersburg and Sumburgh Head, 51° at Hermanstadt, 52° over the south-east of England, and 55° at Munich. Maxima during day as high as 70° at some Irish stations, 71° at Nairn, and a little below or slightly above 80° in most southern regions of Europe. Thermometer not touching 60° at some German stations, and only rising to 54° at Yarmouth.

Wind in morning North-Easterly over our Islands and France, and fresh or strong in force over the English Channel. Cyclonic over the whole of northern Europe, the Northerly current over Sweden blowing strongly or with the force of a gale. Partial cyclonic circulations of moderate or fresh winds shown over southern Europe and the Mediterranean. Northerly winds over Sweden decreasing greatly in force by evening, but spreading eastwards over Finland and Russia. No important change elsewhere.

Barometer fallen in most regions, but risen over Great Britain, Italy, and the south of France. Barometer at 8 a.m. ranging from 30·4 ins. and upwards in the central portion of an anticyclone over the British Isles to less than 30·0 ins. over the south-west of the Iberian Peninsula, to less than 29·6 ins. over the Black Sea, and to less than 29·5 ins. in a large depression over northern Russia. Anticyclone beginning to give way later, and pressure becoming very irregular over the British Isles. Russian disturbance moving quickly eastwards.

IV.—GENERAL NOTES, etc.

At the opening of the week the general distribution of pressure was very irregular and the winds light and variable. Soon, however, an anticyclone began to extend over our western districts from the Atlantic and continued its course, with but little interruption, until the end of the period, when its central portion lay over our Islands and its influence extended over the whole of north-western Europe. The cyclonic systems were mostly confined to the Mediterranean and northern Europe, where the gyrating wind currents were at times strong in force. Over the United Kingdom and its vicinity the wind was chiefly North-Easterly, and, although of little strength generally, occasionally blew a brisk or strong breeze on our southern coasts, and over the adjacent parts of France. The cyclonic disturbances brought some heavy falls of rain to the regions under their influence, but in our Islands the weather, although not always clear, was generally dry. Temperature, after being high on the first day or two, fell decidedly, and in many regions became low for the time of year. At the end of the period a large depression with rather steep gradients on its western side was moving away eastwards over the north of Russia and the barometer had begun to rise somewhat briskly over Scandinavia and the neighbouring portion of the Ocean.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 128.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	18·8	−18·5	15	− 15	SHEFFIELD	50·1	—	43	—	WESTBOURNE	69·9†	+19·5	62†	+ 17
STRATHPEFFER SPA	41·8	+ 3·5	35	+ 3	WORKSOP	55·2	+ 17·2	48	+ 15	VENTNOR HOSPITAL	53·9	+ 6·2	48	+ 6
EDINBURGH	54·0	+18·1	45	+ 15	THURCASTON	62·8	+ 21·8	55	+ 19	BOURNEMOUTH	—	—	—	—
COCKLE PARK	52·0	—	44	—	TUNBRIDGE WELLS	58·7	—	52	—	MARLBOROUGH	64·1	+20·9	57	+ 19
NEWCASTLE-ON-TYNE	39·5	—	34	—	MARGATE	36·3	− 7·1	32	− 6	SOUTHPORT	71·2	—	61	—
YORK	54·3	+13·8	47	+ 12	BROADSTAIRS	43·4	—	38	—	RHYL	72·3	—	63	—
CROMER	39·1	—	34	—	RAMSGATE	—	—	—	—	ABERDOVEY	86·4†	—	76†	—
LOWESTOFT	45·4	—	40	—	EASTBOURNE	52·0	+ 0·6	46	+ 1	TENBY	79·7	+26·8	71	+ 24
HOLLESLEY BAY	52·4	—	46	—	BRIGHTON	59·8	+ 8·5	53	+ 8	TORQUAY	65·8	+12·3	59	+ 11
DUNMOW	62·2	—	55	—	WORTHING	65·3	—	58	—	NEWQUAY	66·2	+14·7	59	+ 13
					BOGNOR	55·0†	—	49†	—	GUERNSEY	53·6†	− 5·4	48†	− 5
					WATERGATE PARK	53·9	—	48	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX. No. 19, p. 110	Douglas	—	—	—	42·2	47·1	− 2·0	36	—	—	—	—	—	—	—	—
" " 20, p. 116	Hillington	—	—	—	43·0	51·9	+ 0·6	69	0	—	—	—	—	—	—	—
" " "	Douglas	—	—	—	41·7	48·5	− 1·7	47	1	—	—	—	—	—	—	—
" " "	Waterford	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 23.] *Third Series.* WEEK ENDING SATURDAY, JUNE 13TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 134.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	76	29	59·2	44·2	51·2	1 below	64	− 5	0	− 1	529	− 14	483	− 53
	1. SCOTLAND, EAST	73	28	59·5	44·3	51·4	2 below	66	− 18	0	0	633	− 42	499	− 84
	2. ENGLAND, N.E.	71	41	56·8	46·6	51·4	3 below	66	− 24	0	0	715	+ 35	342	− 137
	3. ENGLAND, EAST	73	32	59·6	46·9	52·8	3 below	76	− 27	0	0	905*	+ 51	322	− 203
	4. MIDLAND COUNTIES	70	37	59·6	46·4	52·5	3 below	74	− 30	0	0	859	− 30	355	− 180
	5. ENGLAND, SOUTH	69	38	60·5	48·1	53·8	3 below	83	− 28	0	0	987	+ 31	208	− 179
Principal Grazing Districts.	6. SCOTLAND, WEST	76	36	64·4	46·4	54·7	1 above	89	− 1	0	0	749	+ 12	317	− 96
	7. ENGLAND, N.W.	72	36	62·0	47·7	54·3	1 below	86	− 12	0	0	821	+ 39	259	− 129
	8. ENGLAND, S.W.	67	42	60·7	49·2	54·5	2 below	88	− 16	0	0	1006	+ 81	162	− 138
	9. IRELAND, NORTH	76	38	63·2	48·5	55·3	1 above	93	0	0	0	766	− 53	286	− 61
	10. IRELAND, SOUTH	78	44	64·9	50·3	57·1	1 above	106	+ 4	0	0	1004	+ 26	183	− 67
	— CHANNEL ISLANDS	65	42	60·1	50·6	55·0	2 below	91	− 19	0	0	1177	+ 98	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 134.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	1	5 less	111	+14	30·6	+10·9	47	+10	39	+ 8	469	− 86	24	− 4
	1. SCOTLAND, EAST	2	2	3 less	94	+12	16·1	+ 4·3	30	− 10	25	− 8	519	− 87	26	− 4
	2. ENGLAND, N.E.	2	4	0 (average)	79	+ 2	9·5	+ 0·1	30	− 8	26	− 7	557	− 63	28	− 3
	3. ENGLAND, EAST	2	8	4 more	71	− 7	9·0	0·0	24	− 24	21	− 21	666	− 34	34	− 2
	4. MIDLAND COUNTIES	3	9	3 more	79	+ 5	13·4	+ 2·7	23	− 19	20	− 17	560	− 44	28	− 2
	5. ENGLAND, SOUTH	5	15	10 more	84	+11	13·4	+ 2·7	28	− 20	25	− 17	684	− 20	35	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	0	less than half	7 less	104	+19	27·4	+ 8·0	58	+15	49	+12	585*	− 46	30	− 2
	7. ENGLAND, N.W.	2	1	4 less	96	+16	15·9	+ 3·6	53	+10	46	+ 8	637	+ 12	32	+ 1
	8. ENGLAND, S.W.	4	8	3 more	94	+11	18·7	+ 3·6	38	− 10	34	− 9	669	− 69	34	− 4
	9. IRELAND, NORTH	2	1	5 less	112	+15	18·6	+ 5·0	54	+14	46	+12	535	− 78	27	− 4
	10. IRELAND, SOUTH	2	2	4 less	102	+14	19·8	+ 3·5	45	+ 1	39	+ 1	605	− 82	31	− 4
	— CHANNEL ISLANDS	4	3	2 less	98	+12	12·7	+ 0·2	42	− 16	37	− 15	795	− 46	40	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week differed very considerably in the various parts of the Kingdom. Over Ireland, Scotland, and the north of England, it was mostly fair and dry, while elsewhere the sky was usually cloudy or overcast, and some heavy falls of rain were experienced. Thunderstorms occurred on Tuesday or Wednesday over south-western and in some central parts of England, and at the end of the period in many southern localities.

Temperature was a little above the normal in Scotland W. and over Ireland, but from 1° to 3° below it in the other districts. The highest of the maxima were registered during the earlier days of the week, when they ranged from 78° in Ireland S., 76° in Scotland N., Scotland W., and Ireland N., to 69° in England S., 67° in England S.W., and to 65° in the Channel Islands. Later on, the daily maxima over Great Britain were often below 60°, and in several instances below 55°. The absolute minima, which were recorded either on Friday or Saturday, were as low as 28° or 29° respectively in Scotland E. and N., and 32° in England E., while elsewhere they ranged from 36° in Scotland W. and England N.W., to 44° in Ireland S. In London and at Hillington, thermometers on the grass during the night of Friday-Saturday recorded 30° and 27° respectively.

Rainfall was less than the mean over Scotland, Ireland, the north-west of England, and the Channel Islands, and just equal to it in England N.E. In all other districts an excess was shown, the fall in England S. being three times as much as the average. The largest aggregate fall at any individual station was 2·91 ins. in London. In the extreme north-west and north of the Kingdom the fall was very trifling.

Bright Sunshine was very deficient in nearly all English districts, and rather so in Scotland E. In Ireland, England N.W., and Scotland N. and W., however, there was an excess. The percentage of the possible duration ranged from 49 in Scotland W. to 39 in Scotland N., to less than 30 in the eastern half of Great Britain, and to 20 in the Midland Counties.

Barometer and Wind. During the early days of the week, the distribution of pressure was anticyclonic, and the winds light or moderate from the North-Eastward or Eastward. Soon, however, cyclonic disturbances approached our south-eastern and southern districts from France and Germany, and caused the Easterly wind to increase to a moderate gale over the Channel and our south-east coasts. These systems continued to affect us until, towards the end of the period, when another depression—shallow and of irregular form—moved over Great Britain from the northward. This system had the effect of producing winds from a more Northerly point over the Kingdom generally, and light airs from the Westward in the south.

731 | 90 Wy. & S. Ltd.
209 | 70 12 | 02

II.—DATA from which the SUMMARY on page 133 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	53	38	51·7	43·6	47·4	- 1·3	38	0	3	0·04	- 0·40	*	*	*	*
	Stornoway	69	36	59·7	42·7	50·6	- 0·6	60	0	2	0·09	- 0·46	52·6	+ 9·9	42	+ 8
	Wick	59	38	54·3	42·3	47·9	- 3·2	41	0	4	0·14	- 0·26	*	*	*	*
	Lairg $	76	29	65·2	42·1	52·9	+ 1·2	76	0	2	0·10	- 0·42	*	*	*	*
	Glencarron $	76	32	62·8	43·7	52·6	+ 0·1	74	0	2	0·20	- 0·94	*	*	*	*
	Fort Augustus $	62	39	57·1	46·1	51·2	- 2·6	64	0	2	0·25	- 0·25	46·9	+ 16·8	38	+ 14
	Fort William	76	44	63·7	48·7	55·7	+ 1·8	96	0	1	0·12	- 0·77	64·8	+ 24·1	53	+ 20
1. SCOTLAND, E.	Nairn	64	35	57·1	43·9	50·0	- 4·1	56	0	3	0·27	- 0·13	*	*	*	*
	Aberdeen	60	42	55·0	45·9	50·1	- 2·9	57	0	2	0·05	- 0·38	25·0	- 18·5	21	- 15
	Braemar $	73	28	63·8	41·6	51·9	+ 0·9	71	1	1	0·15	- 0·38	*	*	*	*
	Ochtertyre $	71	37	66·0	44·0	54·2	- 0·3	85	0	0	0·00	- 0·65	*	*	*	*
	Leith $	65	44	58·4	47·3	52·5	- 2·1	74	0	1	0·03	- 0·40	*	*	*	*
	Marchmont $	61	39	56·9	43·1	49·5	- 3·0	53	0	3	0·46	- 0·11	34·0	- 7·3	28	- 6
2. ENGLAND, N.E.	Alnwick Castle	62	43	56·2	45·5	50·5	- 2·1	60	0	2	0·05	- 0·40	*	*	*	*
	Durham	62	41	55·6	44·8	49·8	- 4·5	55	0	2	0·31	- 0·13	25·7	- 13·3	22	- 11
	Shields	57	44	54·0	46·6	50·0	- 3·4	56	0	2	0·10	- 0·32	*	*	*	*
	Scarborough M	60	44	55·1	47·0	50·8	- 3·6	62	0	2	0·77	+ 0·31	29·1	—	25	—
	Spurn Head	63	45	58·3	48·7	53·2	- 1·5	78	0	1	0·75	+ 0·39	*	*	*	*
	Fulbeck (Lincolnshire)	71	41	61·8	46·9	53·8	- 2·9	83	0	2	0·48	+ 0·03	28·2	—	24	—
3. ENGLAND, E.	Hillington M	70	32	59·9	45·4	52·2	- 3·7	71	0	1	0·65	+ 0·18	30·0	- 15·5	26	- 13
	Yarmouth	65	39	57·3	48·0	52·3	- 2·7	72	0	1	0·01	- 0·42	*	*	*	*
	Geldeston	68	33	59·6	45·9	52·3	- 3·4	72	0	1	0·04	- 0·36	28·9	- 20·2	25	- 18
	Cambridge	73	35	62·5	46·1	53·7	- 3·4	82	0	3	0·97	+ 0·50	16·8	- 29·1	15	- 25
	Felixstowe	69	38	60·1	47·8	53·5	- 1·7	81	0	2	0·17	—	36·0†	—	32†	—
	Rothamsted	64	36	58·1	46·3	51·8	- 4·1	69	0	4	1·88	+ 1·41	14·4	- 29·9	13	- 26
	Shoeburyness	63	39	60·0	48·9	54·1	- 2·1	85	0	5	1·75	+ 1·40	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	65	39	59·9	44·5	51·7	- 2·1	68	0	1	0·69	+ 0·07	34·9	—	30	—
	Bawtry (Hesley Hall)	70	39	63·1	46·1	54·0	- 2·0	84	0	3	0·96	+ 0·47	*	*	*	*
	Loughborough	69	37	60·7	46·3	53·0	- 4·1	77	0	3	0·49	0·00	*	*	*	*
	Colly Weston (Stamford)	70	39	59·6	46·0	52·3	- 4·9	72	0	2	0·31	- 0·14	*	*	*	*
	Cheadle M	69	40	59·5	45·5	52·0	- 2·2	70	0	2	0·39	- 0·26	*	*	*	*
	Birmingham (Edgbaston)	66	42	59·1	46·5	52·4	- 3·2	73	0	2	0·53	- 0·05	12·3	—	11	—
	Churchstoke M	64	41	59·3	45·9	52·1	- 2·4	71	0	4	0·60	+ 0·10	25·6	- 19·4	22	- 17
	Hereford M	65	44	58·4	48·3	53·0	- 3·9	77	0	3	1·25	+ 0·79	*	*	*	*
	Cirencester	64	41	57·9	46·4	51·8	- 3·8	69	0	5	1·80	+ 1·30	22·6	- 23·4	20	- 21
	Oxford	65	43	58·3	48·3	53·0	- 4·1	77	0	5	1·57	+ 1·10	19·8	- 25·6	17	- 22
5 ENGLAND, S.	London	67	38	60·0	48·3	53·7	- 4·7	82	0	5	2·91	+ 2·47	18·4‡	- 23·3‡	16‡	- 21‡
	Swarraton (Alresford) M	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Dungeness	63	40	59·0	49·4	53·9	- 2·5	83	0	5	1·10	+ 0·80	31·2	—	28	—
	Hastings (St. Leonards)	65	39	60·2	47·9	53·6	- 2·9	81	0	5	1·94	+ 1·56	35·6	- 17·3	32	- 15
	Southampton	69	44	64·3	48·6	55·9	- 2·4	97	0	4	1·47	+ 1·04	35·4	- 19·3	27	- 17
	Portland Bill	65	46	60·0	48·4	53·8	- 2·2	83	0	4	0·28	—	*	*	*	*
	Shaftesbury M	63	41	59·2	46·0	52·1	- 3·3	71	0	5	1·07	+ 0·56	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	76	39	65·4	47·5	55·8	+ 1·4	97	0	0	0·00	- 0·93	*	*	*	*
	Glasgow	68	43	62·8	47·7	54·7	+ 0·3	89	0	0	0·00	- 0·63	57·5	+ 20·5	48	+ 17
	Cally $	74	36	69·9	45·1	56·6	+ 2·5	102	0	0	0·00	- 0·71	*	*	*	*
	Aspatria	68	38	61·9	43·7	52·2	- 1·6	71	0	0	0·00	—	56·1	—	48	—
	Douglas (Isle of Man)	67	41	61·8	47·8	54·3	+ 0·2	86	0	1	0·03	- 0·50	60·1	+ 8·7	51	+ 7
7. ENGLAND, N.W.	Newton Rigg	68	37	62·4	43·4	52·2	- 2·0	71	0	1	0·05	—	68·3	—	58	—
	Stonyhurst	67	41	61·5	47·0	53·8	- 1·3	83	0	1	0·09	- 0·64	54·5	+ 9·5	47	+ 8
	Blackpool M	72	36	64·1	47·2	55·1	- 0·6	92	0	1	0·14	- 0·34	55·1	+ 10·3	47	+ 9
	Manchester (Prestwich)	68	39	61·3	46·2	53·2	- 1·8	78	0	2	0·24	- 0·42	44·6	—	38	—
	Liverpool Obsy. (Bidston)	69	43	62·6	49·1	55·4	- 1·0	94	0	2	0·05	- 0·41	44·0	—	38	—
	Chester (Hawarden Bridge)	69	42	62·7	47·9	54·8	- 2·0	90	0	1	0·10	—	*	*	*	*
	Llandudno M	66	46	61·9	50·0	55·5	- 0·9	95	0	2	0·08	- 0·35	55·3	+ 9·3	48	+ 8
	Holyhead	64	48	59·3	50·6	54·7	- 0·7	89	0	3	0·12	- 0·32	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	64	49	58·9	51·3	54·8	- 0·2	90	0	3	0·15	- 0·29	37·9	- 16·1	33	- 14
	Clifton	67	45	59·9	49·8	54·5	- 2·2	88		5	1·26	+ 0·75	*	*	*	*
	Bath	66	42	60·9	48·6	54·3	- 2·9	86	0	5	1·37	+ 0·87	24·0	—	21	—
	Arlington (N. Devon)	65	43	59·6	46·9	52·8	- 1·9	76	0	5	1·06	+ 0·37	*	*	*	*
	Cullompton M	67	43	62·7	47·5	54·6	- 2·3	88	0	6	0·86	+ 0·33	25·9	21·3	23	- 19
	Falmouth	64	49	60·1	50·7	55·1	- 1·4	92	0	4	0·57	+ 0·02	48·0	- 6·5	43	- 6
	Plymouth	67	48	62·5	49·8	55·7	- 2·0	96	0	3	0·32	- 0·14	45·6	- 4·8	40	- 4
9. IRELAND, N.	Malin Head	63	44	58·7	49·4	53·7	- 0·2	82	0	1	0·02	- 0·50	*	*	*	*
	Edenfel (Omagh)	76	44	67·0	46.9	56·3	+ 2·4	100	0	2	0·09	- 0·55	*	*	*	*
	Blacksod Point	72	38	62·6	52·0	56·9	+ 1·9	104	0	2	0·04	- 0·59	*	*	*	*
	Markree Castle	75	43	66·9	47·6	56·6	+ 2·7	102	0	2	0·05	- 0·68	57·1	+ 17·4	48	+ 15
	Armagh	67	44	64·2	47·0	55·0	+ 0·2	91		2	0·04	- 0·50	50·3	+ 9·9	43	+ 8
	Donaghadee	62	45	59·6	48·0	53·4	- 1·0	89	0	1	0·06	- 0·44	*	*	*	*
10. IRELAND, S.	Dublin	65	46	61·8	51·2	56·1	- 0·6	99	0	3	0·25	- 0·20	41·6	- 4·4	36	- 4
	Birr Castle	72	44	65·1	48·7	56·3	+ 0·9	100	0	2	0·33	- 0·23	47·0	+ 7·0	41	+ 6
	Kilkenny	71	44	64·0	48·7	55·8	+ 0·1	97	0	2	0·19	- 0·35	*	*	*	*
	Waterford	71	48	64·0	52·3	57·7	+ 2·3	110	0	2	0·60	+ 0·03	*	*	*	*
	Roche's Point	69	48	63·1	51·3	56·8	+ 0·1	104	0	3	0·10	- 0·60	*	*	*	*
	Valencia	69	46	64·4	50·0	56·7	0·0	103	0	2	0·05	- 0·73	45·5	- 0·9	40	- 1
	Killarney	78	45	72·0	50·0	60·2	+ 4·8	127	0	2	0·19	- 0·47	*	*	*	*
	Foynes	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	49	59·1	51·1	54·8	- 1·6	90	0	4	0·14	- 0·27	41·7	- 15·8	37	- 14
	Jersey	65	42	61·1	50·0	55·2	- 2·8	92	0	3	0·41	- 0·03	50·6	- 6·6	45	- 6

Stations Marked M are in connection with the Royal Meteorological Society, and those marked $ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

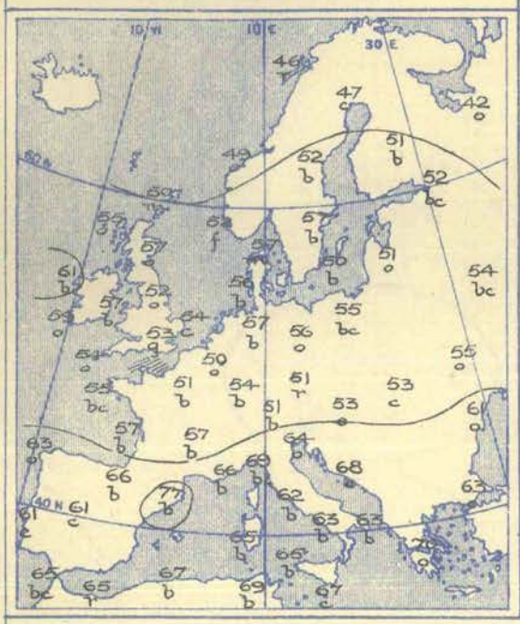
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 7th June, 1903.

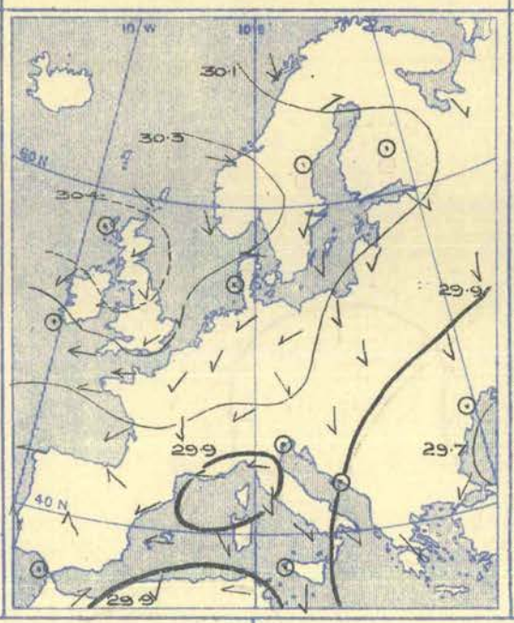
Temperature and Weather.

8 a.m.

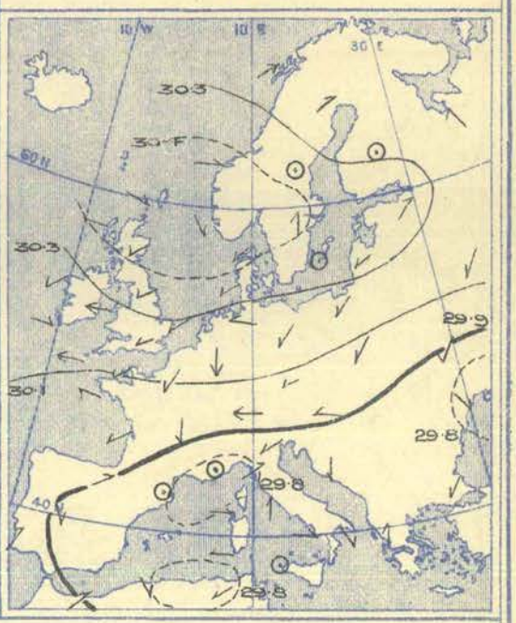


Barometer and Wind.

8 a.m.



6 p.m.



Weather at 8 a.m. fair in most localities, but cloudy or dull over central Europe, Great Britain, and Norway, and at some stations in the Spanish Peninsula and its vicinity. Rainy at Bodö, Prague, Cracow, and over western Algeria. Rain falling later over the north of Italy, the major portion of central Europe and in various Spanish localities. Largest amount, 0·67 in. at Pesaro.

Temperature fallen in most southern and risen in most northern districts. Morning readings ranging from 77° at Barcelona, 70° at Athens, 63° at La Calle and Leghorn, and 66° at Biarritz, to 50° in the north of Scotland and in some parts of Germany, to 46° at Bodö, and to 42° at Archangel. Remaining below 60° all day in many parts of England, but rising to 72° in the west of Ireland, to 70° or slightly higher in a few German and Austrian localities to nearly 80° over Spain, Italy, Greece, and the south of France generally, and to 85° at Perpignan.

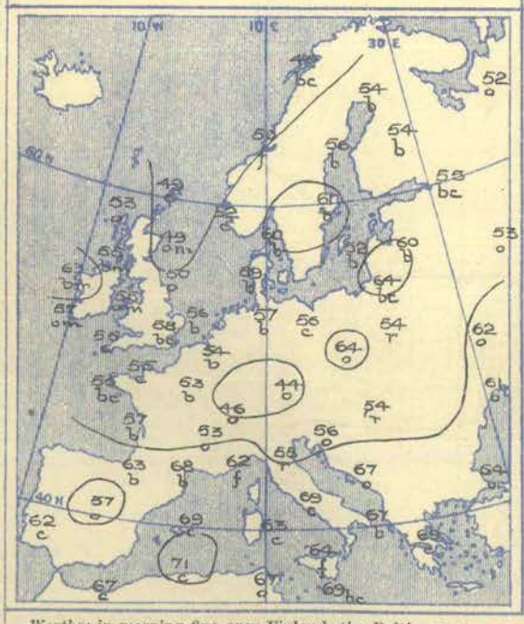
Wind anticyclonic over the whole of northern and north-western Europe, the Northerly current in Norway and that from East-North-East on our southern coast blowing freshly or strongly. Light and irregularly cyclonic on the shores of the Mediterranean. No general change later, but wind backing to south-west in the extreme north of Norway.

Barometer risen quickly over northern Europe, fallen somewhat elsewhere. Readings at 8 a.m., highest, 30·4 ins. and upwards over Scotland and above 30·2 ins. in a large anticyclone embracing the whole of north-western Europe. Lowest, less than 29·8 ins. over the extreme south-eastern countries. No higher than 29·9 ins. in shallow areas over the Gulfs of Genoa and Lions, and also over Algeria. Anticyclone moving east-north-eastwards later, and barometer falling over our Islands and the south-western countries.

Monday, 8th June, 1903.

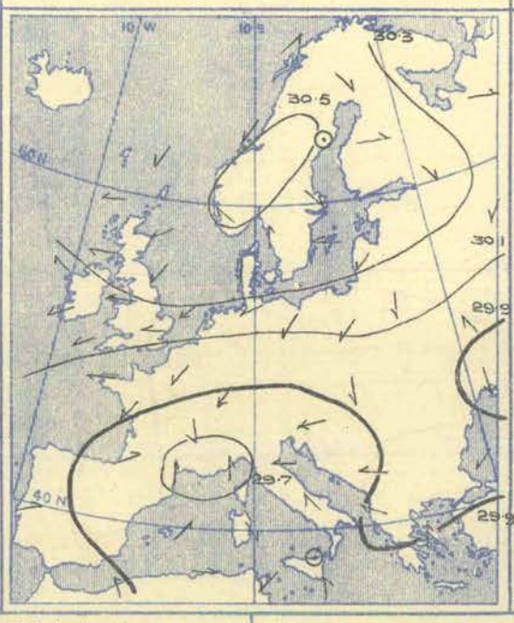
Temperature and Weather.

8 a.m.

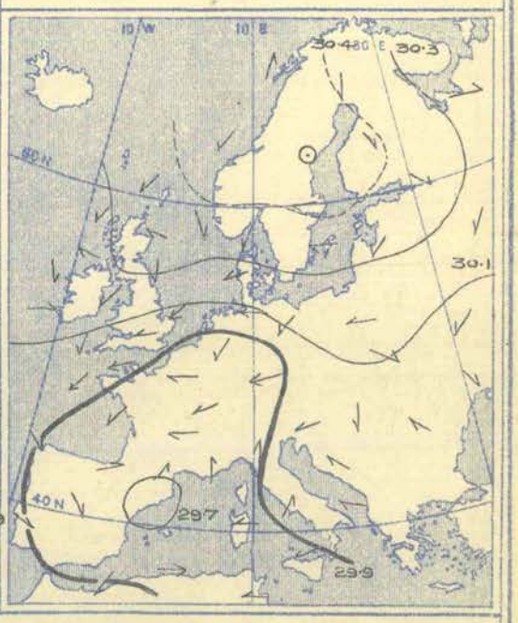


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over Finland, the Baltic, most parts of England, and the north of France; cloudy or overcast in almost all other regions, with rain at Oporto, Florence, and some parts of central Europe, and fog at Christiansund, Nairn, and Palermo. Very heavy rain and thunderstorms later over the south of France and its vicinity (2·84 ins. at Perpignan), and considerable falls over the north of France and the south-east of England (0·58 ins. in. London).

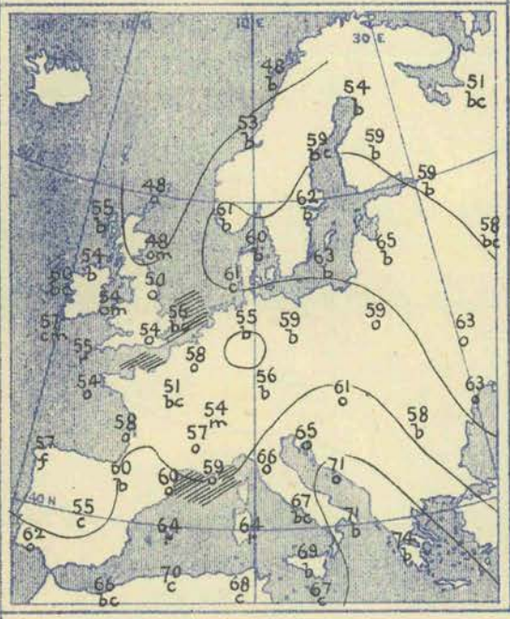
Temperature risen in most northern localities and fallen or changed irregularly elsewhere. Morning readings highest, 69° at several different stations on the shores of the Mediterranean, 67° at Lesina, 64° at Memel, 63° at Blacksod Point, and 62° on the coast of Portugal. Lowest, 44° at Munich, 46° at Bodö, 49° in the north of Scotland, and 53° at Paris and Frankfürt. Rising later to 69° at Stornoway, 70° at Stockholm, 71° at Parsonstown, exceeding 75° at several French and Italian stations and in Greece, and touching 93° at Biskra. Maximum at North Shields over 55°.

Wind at 8 a.m. showing a cyclonic circulation of moderate to fresh winds around the south of France, and another of light winds around the south of Russia. Anticyclonic over all the more northern countries, the North-Easterly wind on our own southern coasts being strong. Not much change in direction later, but North-Easterly wind increasing to a moderate gale over the English Channel.

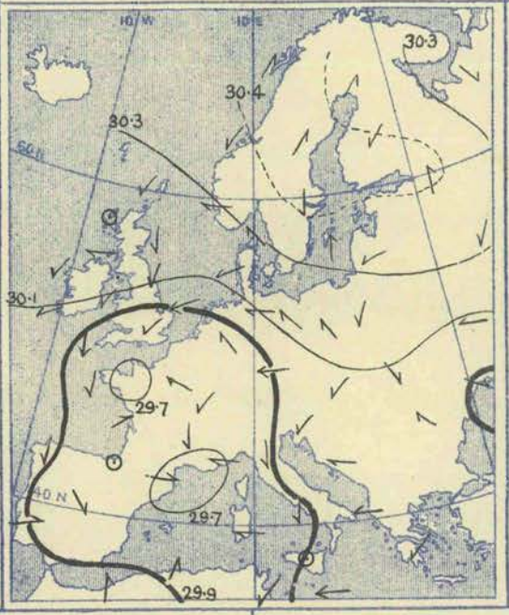
Barometer risen over northern, fallen over southern and south-western Europe. Readings at 8 a.m. ranging from 30·3 ins. to 30·5 ins. in a large anticyclone covering the northern half of our Islands and the greater portion of northern Europe, to less than 29·9 ins. over the south of Russia and the Black Sea, and to below 29·7 ins. in a depression over the south of France. French disturbance spreading northwards later and anticyclone beginning to give way slowly.

Tuesday, 9th June, 1903.

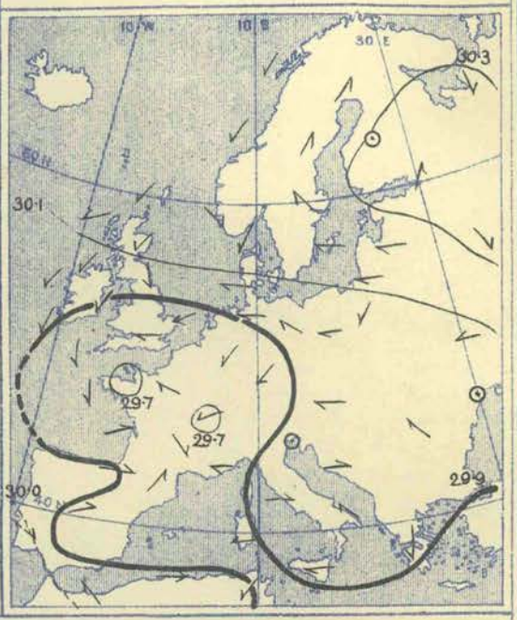
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. still cloudy or overcast generally, but fine over Greece, and many parts of northern Europe. Thunderstorms and heavy rain again experienced during day over France and the north of Italy, as well as in Tunis and at Cracow (2·4 ins. at Nice, and 1·1 ins. at Turin). Rain in smaller quantities also falling over our own southern districts, and thunderstorms occurring at some south-western stations.

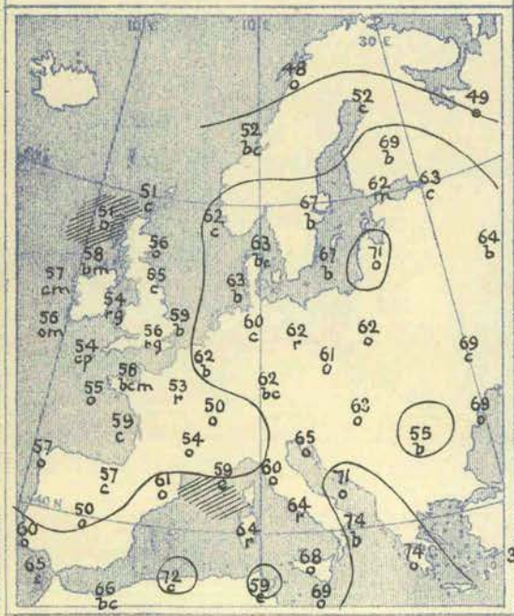
Temperature fallen over the United Kingdom and France, risen in most other regions. Morning readings ranging from 74° at Patras, 71° at Lesina and Brindisi, 70° at Algiers, 69° at Kharkov, and 68° at Memel, to below 60° over Europe as a whole and to a little below 50° over the north of Scotland, the north of Norway, and at some stations in central France. Rising during day to above 80° in Algeria, Greece, Sicily, and in a few German localities, and nearly touching that level in Spain, Italy, and the Netherlands. Highest reading in our Islands, 69° at Parsonstown; that at Nice only 63°.

Wind in morning light and anticyclonic over northern Europe. Two cyclonic circulations shown over the more south-western countries—one over the north of France and all our southern districts (the North-Easterly current on our coasts blowing strongly), and the other over the south of France and the neighbouring parts of Spain. Latter movement becoming less well-defined later, but no great change as a whole.

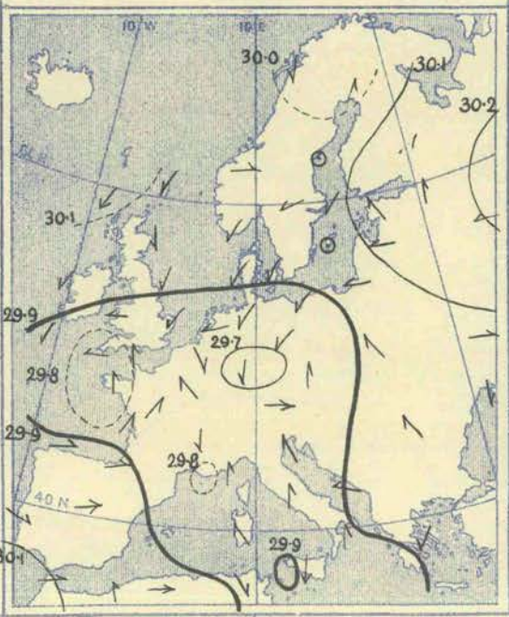
Barometer fallen over the western and central countries, risen elsewhere. 8 a.m. readings highest, above 30·4 ins. to 30·2 ins. in a large anticyclone north of Latt. 55° and having its centre over Finland and Scandinavia. Lowest, 29·7 ins. and less (1) in a depression with its centre near Rennes, and (2) in another system with its centre near Barcelona. Anticyclone giving way later, disturbance over Brittany moving slowly North-Westwards, and that in the south apparently travelling north-eastwards.

Wednesday, 10th June, 1903.

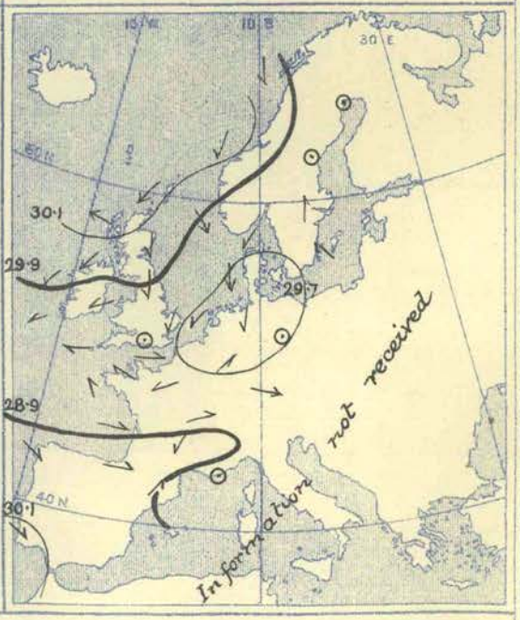
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine over northern Europe and the Netherlands, but cloudy or overcast generally, with rain in various parts of our Islands, France, Germany, and Italy. Rain falling later over Sweden, Denmark, the Netherlands, Germany, France, and in most parts of our own western and southern districts. Largest amounts, 0·75 in. at Nice, 0·80 in. in London, and 1·14 ins. at Karlstad. Thunder heard at Pembroke.

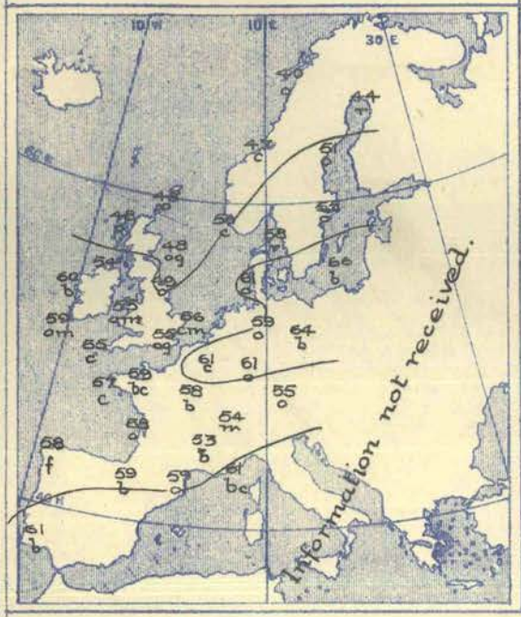
Temperature risen at most stations. Morning readings ranging from 75° at Memel, 74° at Athens and Brindisi, 72° at Algiers, 71° at Riga, and 69° at Kuopio, to below 60° over our Islands and the greater part of France, to 50° at Madrid, Limoges and Le Mans, to 49° at Archangel and Bodö, and to 48° at Wick. Maxima during day as high as 79° at Frankfurt, 77° at Stockholm, 75° at Fanö, and 74° at Perpignan, but only 61° at Nice, and 60° or below in many stations in Great Britain.

Wind in morning cyclonic over the major portion of our area, but the different circulations shown possessing little strength. Light and anticyclonic over northern Russia and Scandinavia. Very little change later over the western half of Europe.

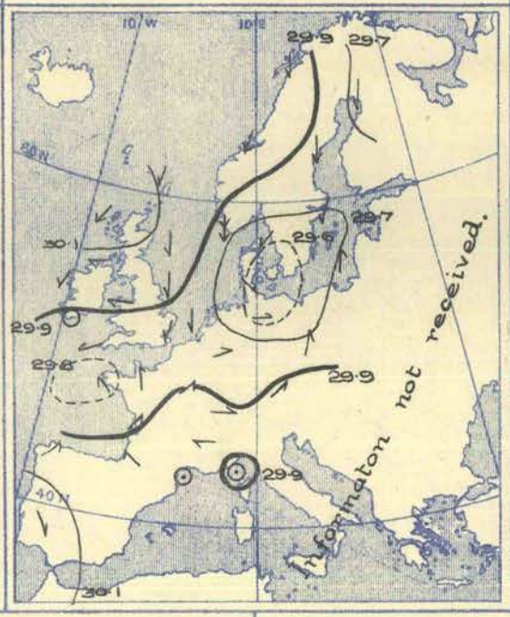
Barometer fallen except over France, Spain, Algeria, and the south of Russia. Morning readings ranging from 30·3 ins. over northern and central Russia, to 29·8 ins. and less in a disturbance having its centre near Scilly, and in another minimum near Cape Sicié, and to below 29·7 ins. in a third system over the west of Germany. German depression moving slowly northwards during day and becoming much modified in form; that near Scilly partially dispersing.

Thursday, 11th June, 1903.

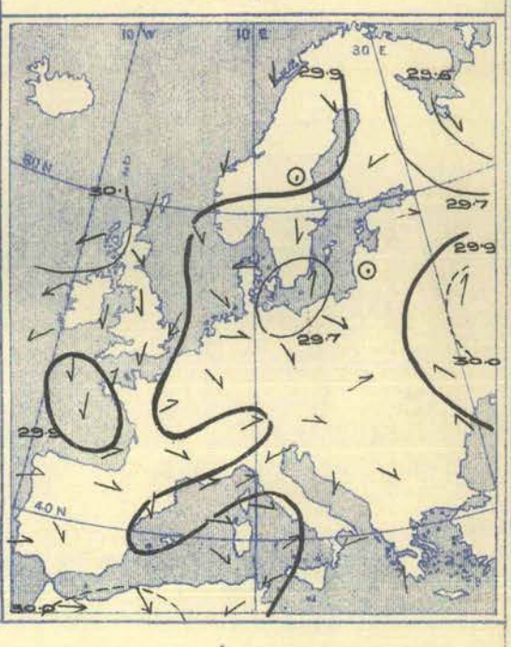
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m., fine at a few French stations, but cloudy or overcast over the western half of Europe as a whole, with rain at Haparanda, Karlstad, Skagen, Cape Gris Nez, and Dungeness. Morning reports from eastern and southern Europe not available. Rain falling later in most of the more northern countries, and thunderstorms occurring over central and in the south-west of France.

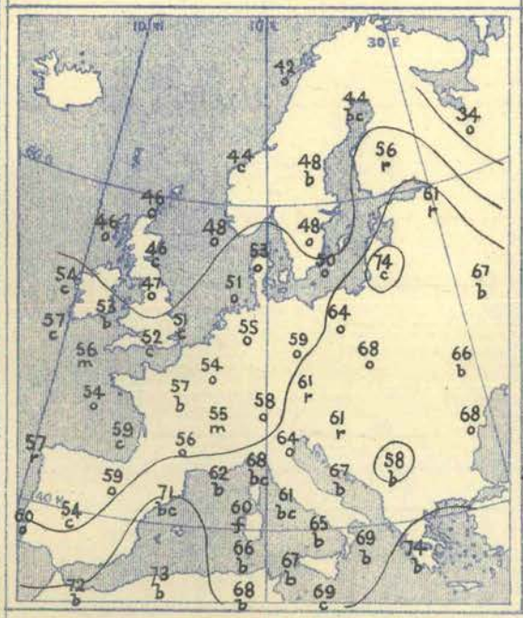
Temperature fallen in most places, but risen in Ireland. 8 a.m. readings ranging from 66° at Wisby, 64° at Berlin, 61° at Nice, and 60° at Blacksod, to below 50° over the north of Scotland and the north-east of England. Rising to about 80° during day over Greece, Algeria, and at a few German stations, and to above 70° in most regions, but remaining below 60° in many parts of the United Kingdom, only touching 52° at Shields, and 55° in London.

Wind at 8 a.m., circulating round a depression over Denmark, and also showing a partial cyclonic circulation over our south-western districts. Light or moderate in force generally, but Northerly current strong at Faerder and Spurn Head.

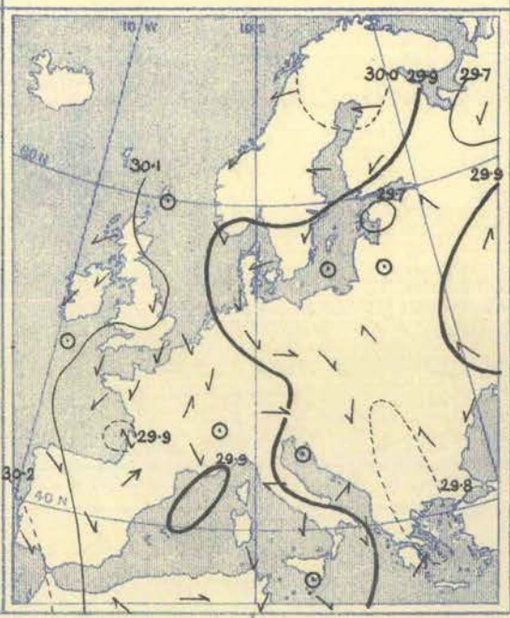
Barometer at 8 a.m., falling over Scandinavia and Denmark, rising over France, Germany, and our Islands. Morning readings ranging from above 30·1 ins. over the north of Scotland, to below 29·8 ins. off our south-west coasts, and to less than 29·6 ins. in a depression to the eastward of the North Sea. Latter system becoming less deep by evening, and pressure increasing somewhat in most parts of western Europe.

Friday, 12th June, 1903.

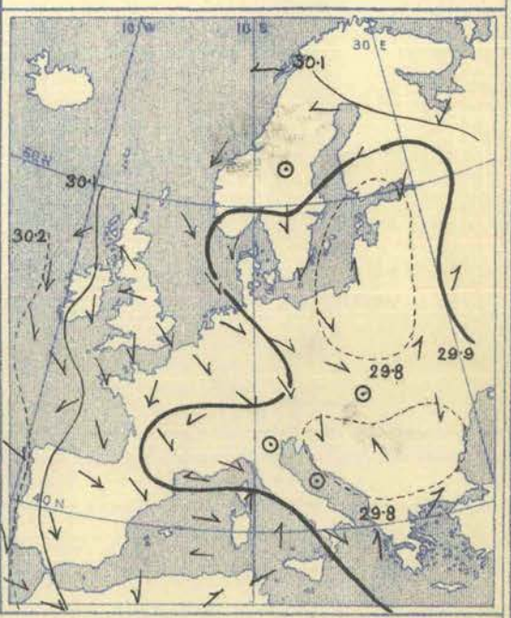
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull very generally, but fine and bright on nearly all the shores of the Mediterranean. Rainy at St. Petersburg, some Austria-Hungarian stations, Turin, and Corunna. Rain falling later in the north and extreme west of our Islands, in most parts of France (accompanied by thunder and lightning in the south and south-west), and in many regions of central Europe. Largest fall, 1·7 ins. at Vienna.

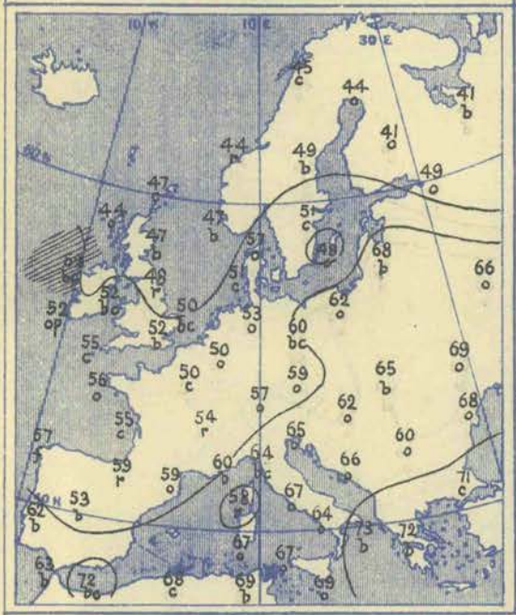
Temperature fallen over the north-western countries. Morning readings highest, (1) 74° at Memel, (2) 74° at Athens, 73° at Algiers, 71° at Barcelona, (3) 67° at Moscow. Lowest, (1) 34° at Archangel, 42° at Bodö, (2) 46° at most Scotch stations, 50° or 51° in several parts of England, (3) 50° at Limoges, and 54° at Madrid. Touching or exceeding 70° during day at most stations in central and southern Europe, and exceeding 80° over Greece and Algeria. Remaining very low over our Islands—maximum in London only 54°. Succeeding night very cold over England; ground frost recorded in places.

Wind in morning showing numerous complete or partial cyclonic circulations of light or moderate force. Mainly Northerly or North-Easterly over Scandinavia and the United Kingdom, and North-Westerly over the Iberian Peninsula. No decided or general change during day.

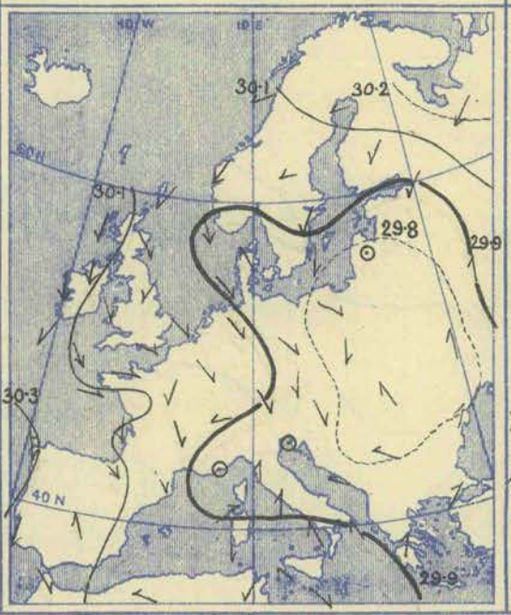
Barometer risen over north-western and western Europe, changed little elsewhere. Morning readings ranging from above 30·1 ins. in a large area embracing Scotland, Ireland, the west of Spain and the adjacent parts of the Atlantic, and about 30·0 ins. over central Russia and Lapland, to below 29·8 ins. in an elongated cyclonic area, with two minima below 29·7 ins., extending from north Germany north-eastwards to the White Sea and northern Russia. Several other shallow disturbances existing in different parts of southern Europe. Barometer rising quickly over the north of Russia during day, and slightly over England and Ireland, but a fall taking place in Scotland and the change travelling steadily southwards.

Saturday, 13th June, 1903.

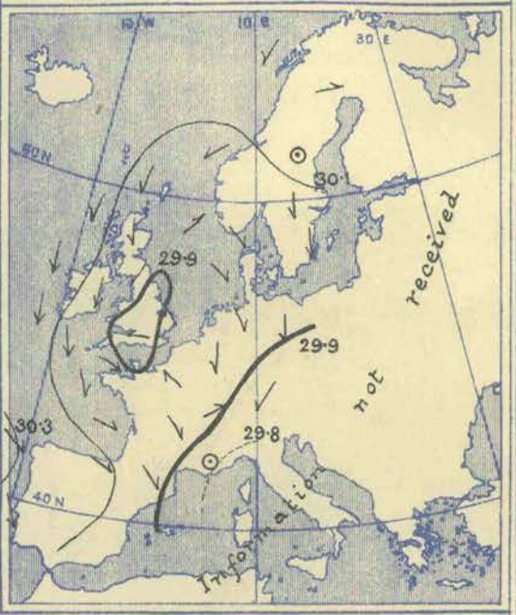
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather in morning fine in Greece, and at several Spanish stations, but cloudy or dull very generally. Showery in some British and Irish localities, and steady rain falling in the south-west and east of France, the south of Corsica, at Tunis, and in different parts of central Europe; fog prevailing at Corunna. Rain later in most parts of France, and the United Kingdom—as much as 0·75 in. at Spurn Head, and 1·03 ins. and 1·02 ins. in London, and at Belfort. Thunderstorms occurring at Jersey and Biarritz.

Temperature fallen in most places. Readings at 8 a.m. highest, 73° at Brindisi, 72° at Athens and Oran, 69° at Kiev, 68° at Riga, and 66° at Moscow. Highest in our Islands, 55° at Scilly. Lowest, 41° at Archangel and Kuopio, 44° at Stornoway, 50° at Paris, and 53° at Madrid. Remaining very low all day over the western half of Europe. Maxima below 55° in many parts of Great Britain, and no higher than 54° at Lyons, and 63° at Corunna. Thermometer just touching 70° at Nice, and 72° at Lisbon.

Wind in morning moderate to strong from between North and East over the greater portion of western Europe, and light and variable in the south. A feeble cyclonic circulation shown over Russia and central Europe, and an irregular cyclonic movement over England. Latter becoming more clearly marked by evening, but very little change elsewhere.

Barometer changed very irregularly. Morning readings ranging from above 30·3 ins. at Corunna and above 30·2 ins. at Archangel, to below 30·0 ins. in an irregularly shaped area over England, and to below 29·8 ins. in a large shallow depression over the west of Russia, and the adjacent portions of Germany and Hungary. Pressure increasing somewhat in most northern and north-western countries later, but decreasing slowly over England, and the major portion of France.

IV.—GENERAL NOTES, etc.

At the commencement of the week the barometer was highest, 30·4 ins. in an anticyclone lying over the north-western portion of Europe, while depressions were shown in the south. The general direction of the wind was consequently Northerly to Easterly, over all the northern regions, and variable elsewhere. As the week progressed, the anticyclone gave way slowly and became much modified in form, while cyclonic disturbances travelled northwards from the south of France to our own southern districts, and also to Germany and Denmark. Towards the end of the week the general distribution of pressure became very complex, and by Saturday a large shallow disturbance lay over the eastern part of central Europe, and a shallow area of very irregular form had reached England from the northward. By this time the northern anticyclone had dispersed, and pressure was highest over the White Sea on the one hand, and over the Spanish Peninsula on the other. The general character of the weather was very rainy as a whole, except in the extreme north of Europe, the falls being occasionally very heavy over Italy and France, as well as over the south of England. The general level of temperature was low for the time of year, the deficiency of heat being most marked over the north-western countries towards the end of the week; during the night of Friday-Saturday a slight frost was recorded on the grass in London and also in some parts of Norfolk. Thunderstorms were rather few, but some were experienced in various parts of France, and in one or two localities over the southern half of England.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 134.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	27·8	- 8·0	22	- 6
STRATHPEFFER SPA	44·2	+ 6·2	36	+ 5
EDINBURGH	30·5	- 4·5	25	- 4
COCKLE PARK	30·0	—	25	—
NEWCASTLE-ON-TYNE	21·0	—	18	—
YORK	37·5	- 2·7	32	- 2
CROMER	29·9	—	26	—
LOWESTOFT	34·3	—	30	—
HOLLESLEY BAY	31·4	—	28	—
DUNMOW	16·3	—	14	—
SHEFFIELD	19·0	—	16	—
WORKSOP	25·0	- 12·5	22	- 11
THURCASTON	25·2	- 15·4	22	- 13
TUNBRIDGE WELLS	30·7	—	27	—
MARGATE	27·2	- 15·8	24	- 14
BROADSTAIRS	30·4	—	27	—
RAMSGATE	—	—	—	—
EASTBOURNE	34·9	- 16·6	31	- 15
BRIGHTON	36·2	- 15·5	32	- 14
WORTHING	33·0	—	29	—
BOGNOR	32·5†	—	29†	—
WATERGATE PARK	27·4	—	24	—
WESTBOURNE	34·6†	- 15·4	31†	- 14
VENTNOR HOSPITAL	29·2	- 16·8	26	- 15
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	16·9	- 26·7	15	- 23
SOUTHPORT	56·8	—	49	—
RHYL	53·5	—	46	—
ABERDOVEY	51·4†	—	45†	—
TENBY	—	—	—	—
TORQUAY	43·6	- 11·2	39	- 10
NEWQUAY	49·0	- 3·4	43	- 3
GUERNSEY	32·7†	- 26·3	29†	- 24

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending May 23rd, 1903.	Lairg	64	29	?59·3	39·7	?48·9	+ 1·8	58	6	3	0·30	- 0·18	—	—	—	—
" " " "	Tenby	—	—	—	—	—	—	—	—	—	—	—	54·3	+ 3·3	49	+ 3
" " 30th "	Lairg	?73	46	?69·7	52·1	?60·4	+11·7	129	0	1	0·02	- 0·47	—	—	—	—
" " " "	Hillington	—	—	—	—	—	—	—	—	—	—	—	73·7	+26·7	65	+24
" " " "	Tenby	—	—	—	—	—	—	—	—	—	—	—	58·2	+ 6·3	52	+ 6

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 24.] *Third Series.* WEEK ENDING SATURDAY, JUNE 20TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 140.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	66	27	54·8	39·2	46·4	7 below	43	−30	8	+ 7	572	− 44	491	− 46
	1. SCOTLAND, EAST	67	28	55·1	41·0	47·6	7 below	43	− 45	3	+ 3	676	− 87	502	− 81
	2. ENGLAND, N.E.	62	34	54·2	43·6	48·5	7 below	46	− 50	0	0	761	− 15	342	− 137
	3. ENGLAND, EAST	63	40	55·6	45·0	49·9	8 below	55	− 54	0	0	960	− 3	322	− 203
	4. MIDLAND COUNTIES	67	36	55·9	42·8	48·9	8 below	48	− 61	0	0	907	− 91	355	− 180
	5. ENGLAND, SOUTH	67	38	56·1	45·9	50·6	7 below	60	− 57	0	0	1046*	− 27	208	− 179
Principal Grazing Districts.	6. SCOTLAND, WEST	65	34	57·4	42·5	49·5	6 below	53	− 41	0	0	802	− 29	317	− 96
	7. ENGLAND, N.W.	65	33	56·8	43·4	49·6	7 below	53	− 50	0	0	874	− 11	259	− 129
	8. ENGLAND, S.W.	65	41	56·0	46·1	50·7	7 below	61	− 47	0	0	1067	+ 34	162	− 138
	9. IRELAND, NORTH	64	34	57·0	45·3	50·8	5 below	62	− 34	0	0	830*	− 85	286	− 61
	10. IRELAND, SOUTH	72	36	60·7	45·3	52·5	5 below	74	− 32	0	0	1080*	− 4	183	− 67
	— CHANNEL ISLANDS	61	45	56·9	49·2	52·8	6 below	76	− 40	0	0	1253	+ 58	49	− 68

Rainfall.

	DISTRICTS. (See p. 140.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	1	6 less	113	+13	30·7	+10·4
	1. SCOTLAND, EAST	3	2	3 less	97	+11	16·3	+ 4·0
	2. ENGLAND, N.E.	3	12	7 more	82	+ 2	10·7	+ 0·9
	3. ENGLAND, EAST	6	30	26 more	77	− 4	12·0	+ 2·6
	4. MIDLAND COUNTIES	4	14	8 more	83	+ 6	14·8	+ 3·6
	5. ENGLAND, SOUTH	5	18	13 more	89	+13	15·2	+ 4·1
Principal Grazing Districts.	6. SCOTLAND, WEST	2	1	6 less	106	+17	27·5	+ 7·3
	7. ENGLAND, N.W.	3	3	2 less	99	+16	16·2	+ 3·3
	8. ENGLAND, S.W.	4	20	14 more	98	+12	20·7	+ 5·0
	9. IRELAND, NORTH	1	1	6 less	113	+12	18·7	+ 4·4
	10. IRELAND, SOUTH	2	1	6 less	104	+13	20·0*	+ 3·1
	— CHANNEL ISLANDS	6	16	12 more	104	+15	14·3	+ 1·4

Bright Sunshine.

	DISTRICTS. (See p. 140.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	41	+ 3	33	+ 3	510	− 82	24	− 4
	1. SCOTLAND, EAST	34	− 6	28	− 5	553	− 93	26	− 4
	2. ENGLAND, N.E.	31	− 7	26	− 6	588	− 70	28	− 3
	3. ENGLAND, EAST	11	−37	10	−32	677	− 71	32	− 3
	4. MIDLAND COUNTIES	16	−28	14	−24	576	− 72	28	− 3
	5. ENGLAND, SOUTH	19	−28	16	−25	703	− 49	34	− 2
Principal Grazing Districts.	6. SCOTLAND, WEST	32	−12	27	−10	617	− 58	29	− 3
	7. ENGLAND, N.W.	34	− 5	29	− 5	671	+ 6	32	0
	8. ENGLAND, S.W.	19	−32	17	−28	688	−100	33	− 5
	9. IRELAND, NORTH	32	− 7	27	− 6	567	− 85	27	− 4
	10. IRELAND, SOUTH	33	−10	29	− 9	638	− 93	31	− 5
	— CHANNEL ISLANDS	19	−39	17	−35	814	− 85	39	− 4

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was very dull and wet over the greater part of England, but mostly dry and frequently bright in Ireland and Scotland. Thunderstorms were experienced in several English localities during the earlier days of the period, and also (on Sunday) on the east coast of Ireland.

Temperature was much below the mean, the deficit ranging from 5° in Ireland to as much as 8° in England E. and the Midland Counties. The highest of the maxima were registered, as a rule, during the middle of the week, when they ranged from 72° in Ireland S., to 62° in England N.E., and to 61° in the Channel Islands. Both during the early days and towards the end of the week, the daily maxima were little above 50°, and in some cases no higher than that value. The lowest of the minima, which were recorded either on the 14th or 20th, were as low as 27° in Scotland N. and 28° in Scotland E. (at Lairg and Braemar on Saturday) while elsewhere they ranged from 33° in England N.W. to 41° in England S.W., and to 45° in the Channel Islands.

Rainfall was unusually heavy and continuous over the southern half of England. In England S. and S.W. the fall was more than three times as much as the mean, and in the Channel Islands four times as much, while in England E. it was more than seven times as great. The heaviest aggregate falls for any individual stations were 3·26 ins. in London, 3·38 ins. at Felixstowe, 3·87 ins. at Rothamsted, 4·01 ins. at Oxford, and 4·40 ins. at Shoeburyness. Over Ireland and Scotland the total fall was only one or two-hundredths of an inch.

Bright Sunshine was again deficient over England, and to a smaller extent in all other parts of the Kingdom, except Scotland N. The percentage of the possible duration ranged from 33 in the latter district to only 10 in England E.

Barometer and Wind. During the earlier half of the period a slow moving and complex disturbance (which brought the bulk of the rain) lay over our more southern counties, and the adjacent parts of the Continent, and the resulting Northerly to Easterly winds were occasionally fresh or strong except on our northern coast. By Wednesday, the system was moving away north-eastwards, and the winds over England drew into North-West. By Thursday, however, a fresh baric fall had set in on our south-west coasts, and during the remainder of the week our Islands were under the influence of a disturbance that moved slowly eastwards across Brittany and the north of France. The Easterly winds caused by this system were very strong on our south and south-east coasts. At the end of the week the general distribution of pressure had improved, and an anticyclone of considerable size was extending over us from the westward. Slight shocks of earthquake were felt at Holyhead and Douglas on Friday.

731 | 70 Wy. & S. Ltd
209 | 90 12 | 02

II.—DATA from which the SUMMARY on page 139 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	54	37	51·0	41·1	45·7	− 4·0	30	3	4	0·15	− 0·30	*	*	*	*
	Stornoway	57	36	54·4	39·3	46·3	− 6·1	41	8	4	0·17	− 0·38	50·4	+ 8·0	40	+ 6
	Wick	56	30	53·1	38·0	45·0	− 7·3	38	11	2	0·03	− 0·37	*	*	*	*
	Lairg Ş	66	27	57·9	35·9	46·1	− 6·6	*54	17	2	0·06	− 0·46	*	*	*	*
	Glencarron Ş	63	31	54·5	36·8	45·0	− 8·7	43	15	1	0·04	− 1·11	*	*	*	*
	Fort Augustus Ş	63	32	55·4	41·4	47·9	− 7·0	44	2	3	0·11	− 0·41	?34·7	+ 4·3	?28	+ 4
	Fort William	63	36	57·1	42·0	49·0	− 5·8	49	0	0	0·00	− 0·92	39·8	− 0·9	33	− 1
1. SCOTLAND, E.	Nairn	62	30	56·1	40·9	48·0	− 6·9	47	3	3	0·08	− 0·35	*	*	*	*
	Aberdeen	61	35	53·7	40·9	46·9	− 7·2	39	3	4	0·15	− 0·29	40·5	− 3·2	33	− 3
	Braemar Ş	57	28	53·6	37·5	45·0	− 7·5	40	13	2	0·02	− 0·53	*	*	*	*
	Ochtertyre Ş	67	32	60·3	40·3	49·6	− 6·5	60	5	1	0·09	− 0·58	*	*	*	*
	Leith Ş	60	42	55·6	45·0	49·9	− 6·1	55	0	2	0·25	− 0·19	*	*	*	*
	Marchmont Ş	55	38	51·4	41·6	46·2	− 7·7	31	1	3	0·50	− 0·09	29·5	− 11·9	24	− 10
2. ENGLAND, N.E.	Alnwick Castle	59	35	54·0	41·9	47·5	− 6·6	39	0	3	1·71	+ 1·26	*	*	*	*
	Durham	60	34	53·0	41·4	46·8	− 9·0	36	2	4	1·46	+ 1·01	36·3	− 2·7	31	− 2
	Shields	57	40	52·7	44·3	48·2	− 6·5	43	0	3	1·60	+ 1·18	*	*	*	*
	Scarborough Ṁ	58	43	54·0	43·1	48·2	− 7·5	43	0	3	0·76	+ 0·29	40·1	—	34	—
	Spurn Head	59	45	55·1	47·6	51·1	− 5·0	64	0	2	0·68	+ 0·32	*	*	*	*
	Fulbeck (Lincolnshire)	62	38	56·2	43·4	49·4	− 8·3	52	0	3	0·68	+ 0·22	16·9	—	14	—
3. ENGLAND, E.	Hillington Ṁ	60	41	54·6	44·6	49·3	− 8·4	51	0	6	1·81	+ 1·31	8·4	− 37·0	7	− 32
	Yarmouth	59	43	54·7	46·3	50·2	− 6·3	57	0	7	1·87	+ 1·43	*	*	*	*
	Geldeston	58	42	55·6	44·8	49·8	− 7·3	55	0	6	2·50	+ 2·09	10·5	− 38·5	9	− 33
	Cambridge	63	40	57·6	43·1	49·9	− 8·7	55	0	5	3·16	+ 2·67	7·7	− 38·3	7	− 33
	Felixstowe	60	42	55·7	45·8	50·4	− 6·5	59	0	5	3·38	—	20·1†	18†	—	
	Rothamsted	63	40	55·0	43·8	49·0	− 8·4	49	0	6	3·87	+ 3·38	12·7	− 31·9	11	− 28
	Shoeburyness	63	42	56·0	46·3	50·8	− 7·1	62	0	5	4·40	+ 4·04	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	62	36	54·7	41·8	47·8	− 7·3	41	1	3	0·74	+ 0·09	34·8	—	30	—
	Bawtry (Hesley Hall)	65	37	57·7	42·6	49·6	− 8·0	53	0	3	0·33	− 0·19	*	*	*	*
	Loughborough	61	41	55·8	44·1	49·5	− 8·9	53	0	4	1·08	+ 0·58	*	*	*	*
	Colly Weston (Stamford)	61	39	56·4	43·4	49·5	− 8·5	53	0	6	1·42	+ 0·97	*	*	*	*
	Cheadle Ṁ	60	40	54·4	42·2	47·9	− 7·7	41	0	2	0·18	− 0·48	*	*	*	*
	Birmingham (Edgbaston)	62	41	55·1	44·0	49·2	− 7·8	50	0	4	1·01	+ 0·41	6·2	—	5	—
	Churchstoke Ṁ	63	36	55·7	40·3	47·5	− 8·3	46	5	4	0·92	+ 0·42	18·7	− 26·1	16	− 23
	Hereford Ṁ	67	39	56·9	42·4	49·2	− 8·9	50	0	3	1·16	+ 0·70	*	*	*	*
	Cirencester	65	40	55·6	42·5	48·6	− 8·2	46	0	5	2·91	+ 2·41	12·8	− 33·2	11	− 29
	Oxford	65	41	56·7	44·3	50·1	− 8·3	57	0	5	4·01	+ 3·53	18·7	− 26·8	16	− 23
5. ENGLAND, S.	London	67	43	56·7	45·4	50·7	− 9·0	61	0	5	3·26	+ 2·81	14·5‡	− 27·7‡	13‡	− 24‡
	Swarraton (Alresford) Ṁ	64	38	55·8	43·2	49·1	− 7·4	50	0	4	1·38	+ 0·92	*	*	*	*
	Dungeness	61	46	57·3	49·0	52·9	− 5·0	76	0	6	0·78	+ 0·48	20·0	—	18	—
	Hastings (St. Leonards)	60	44	56·5	46·7	51·3	− 6·5	65	0	3	0·55	+ 0·16	29·0	− 24·1	25	− 21
	Southampton	66	43	58·0	46·4	51·8	− 7·7	69	0	5	2·56	+ 2·13	14·6	− 35·7	13	− 31
	Portland Bill	60	45	54·6	47·1	50·6	− 6·6	60	0	5	1·51	—	*	*	*	*
	Shaftesbury Ṁ	64	42	53·5	43·2	48·0	− 8·6	42	0	5	2·22	+ 1·70	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	65	34	58·8	40·5	49·0	− 6·5	55	4	1	0·01	− 0·93	*	*	*	*
	Glasgow	61	40	56·3	44·5	50·0	− 5·5	56	0	2	0·04	− 0·62	22·7	− 14·6	19	− 12
	Cally Ş	62	37	58·8	41·7	49·7	− 5·6	55	1	2	0·08	− 0·66	*	*	*	*
	Aspatria	61	35	55·7	40·8	47·7	− 7·1	45	3	3	0·23	—	30·2	—	25	—
	Douglas (Isle of Man)	61	40	57·4	45·2	50·9	− 4·3	62	0	3	0·15	− 0·39	41·5	− 9·2	35	− 7
7. ENGLAND, N.W	Newton Rigg	63	33	56·2	38·9	47·0	− 7·7	48	9	4	0·39	—	28·3	—	24	—
	Stonyhurst	63	40	56·3	43·5	49·5	− 6·9	53	0	2	0·10	− 0·65	34·4	− 10·5	29	− 9
	Blackpool Ṁ	65	35	58·7	40·6	49·0	− 8·0	55	4	3	0·33	− 0·17	36·1	− 8·9	31	− 8
	Manchester (Prestwich)	63	39	58·0	42·9	49·9	− 6·5	55	0	3	0·18	− 0·52	24·2	—	21	—
	Liverpool Obsy. (Bidston)	63	40	56·7	43·9	49·9	− 7·9	55	0	4	0·40	− 0·08	26·4	—	23	—
	Chester (Hawarden Bridge)	63	37	57·1	43·4	49·8	− 8·1	55	0	2	0·48	—	*	*	*	*
	Llandudno Ṁ	61	45	56·4	47·8	51·8	− 5·7	69	0	3	0·54	+ 0·10	49·8	+ 3·5	43	+ 3
	Holyhead	57	45	54·6	46·4	50·2	− 6·2	57	0	3	0·27	+ 0·17	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	57	44	55·3	45·6	50·1	− 6·0	57	0	3	0·61	+ 0·16	20·3	− 34·0	18	− 30
	Clifton	63	44	56·3	45·3	50·4	− 7·7	59	0	4	2·25	+ 1·74	*	*	*	*
	Bath	63	44	55·9	44·7	49·9	− 8·7	55	0	4	2·90	+ 2·40	14·6	—	13	—
	Arlington (N. Devon)	60	41	54·9	44·1	49·1	− 6·8	50	0	3	2·34	+ 1·61	*	*	*	*
	Cullompton Ṁ	65	44	56·6	45·9	50·9	− 7·1	62	0	5	1·65	+ 1·13	11·7	− 35·3	10	− 31
	Falmouth	60	47	55·7	49·0	52·1	− 5·6	71	9	6	1·12	+ 0·56	21·1	− 33·3	19	− 29
	Plymouth	60	45	57·3	48·0	52·3	− 6·5	72	0	5	2·84	+ 2·39	20·1	− 30·6	18	− 27
9. IRELAND, N.	Malin Head	58	44	55·6	47·1	51·1	− 3·9	64	0	0	0·00	− 0·53	*	*	*	*
	Edenfel (Omagh)	64	38	58·9	44·0	50·9	− 4·2	62	0	2	0·07	− 0·60	*	*	*	*
	Blacksod Point	58	47	56·3	49·3	52·6	− 3·4	74	0	0	0·00	− 0·63	*	*	*	*
	Markree Castle	63	34	59·4	43·1	50·7	− 4·3	61	0	1	0·04	− 0·70	38·1	− 0·6	32	− 1
	Armagh	63	37	57·6	42·7	49·6	− 6·4	53	0	1	0·01	− 0·56	25·8	− 14·2	22	− 12
	Donaghadee	59	43	54·0	45·7	49·6	− 5·8	53	0	3	0·15	− 0·36	*	*	*	*
10. IRELAND, S.	Dublin	61	41	58·5	46·6	52·1	− 5·9	71	0	4	0·09	− 0·35	34·6	− 11·1	30	− 10
	Birr Castle	61	37	59·4	40·6	49·4	− 7·2	58	4	2	0·03	− 0·54	24·9	− 14·5	21	− 12
	Kilkenny	63	37	59·1	44·1	51·1	− 5·5	64	0	2	0·11	− 0·44	*	*	*	*
	Waterford	63	42	60·4	46·3	52·9	− 4·0	76	0	2	0·06	− 0·54	*	*	*	*
	Roche's Point	61	43	59·9	47·3	53·2	− 4·6	78	0	2	0·05	− 0·63	*	*	*	*
	Valencia	62	38	59·9	46·6	52·8	− 4·0	76	0	1	0·10	− 0·68	40·8	− 4·9	36	− 4
	Killarney	72	36	65·0	45·1	54·4	− 2·0	87	0	1	0·03	− 0·63	*	*	*	*
	Foynes	68	40	63·1	45·7	53·8	− 2·7	83	0	0	0·00	− 0·60	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	47	57·3	49·0	52·9	− 4·6	76	0	5	0·64	+ 0·24	33·2	− 24·5	29	− 22
	Jersey	60	45	56·4	49·4	52·7	− 6·4	75	0	7	2·52	+ 2·08	9·2	− 48·5	8	− 43

Stations Marked Ṁ are in connection with the Royal Meteorological Society, and those marked Ş with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

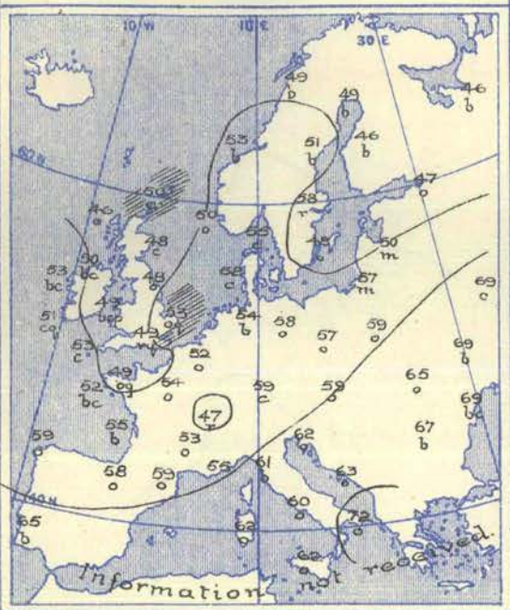
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 14th June, 1903.

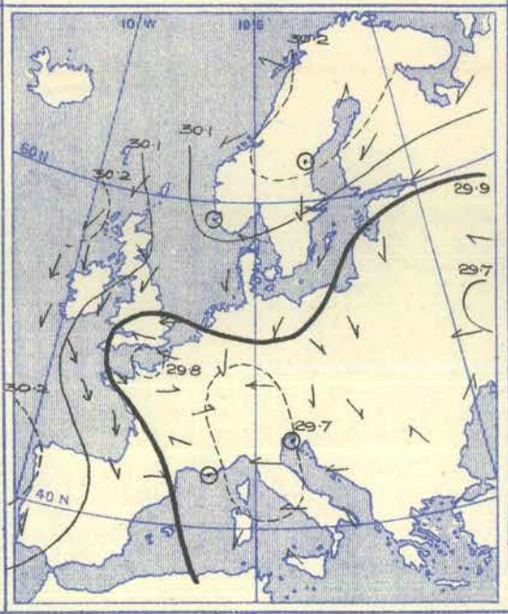
Temperature and Weather. 8 a.m.

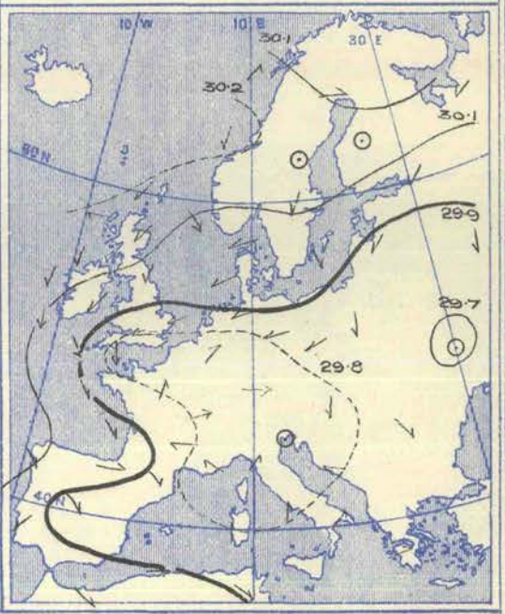


Weather in morning fine and bright in the extreme north of Europe, and also in the south of Russia. Cloudy or dull in almost all other regions, with rain over the south of England and the north of France, and showers on the coast of Wales. Rain also falling at Stockholm, Belfort, and Nice. Very heavy rain falling subsequently over Germany and the southern counties of England, and considerable amounts in many other localities. Largest amounts, 2·01 ins. at Oxford, 1·58 ins. at Frankfürt, 1·38 ins. at Cherbourg, and 1·28 ins. at Naples.

Temperature very low generally. 8 a.m. readings below 50° in nearly all parts of the United Kingdom, and as low as 45° at Oxford and 44° at Liverpool, above 50° at most stations over the northern half of the Continent, and as high as 69° at Moscow. Above 60° over south-eastern and southern Europe, and as high as 72° at Brindisi. Maxima during day only 51° or 52° at Oxford and in London. Low over the northern countries generally, but above 80° in Greece, and above 70° on most shores of the Mediterranean, and in the south of Austria.

Barometer and Wind. 8 a.m. and 6 p.m.



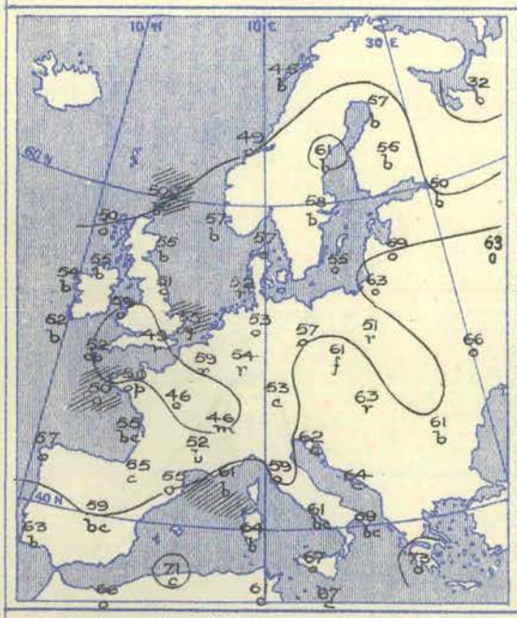


Wind light and anticyclonic over Scandinavia, but cyclonic elsewhere, the most definite circulation being over our Islands and the adjacent portion of the Continent. The Easterly current blowing strongly on our south-east coasts, and the Northerly and North-Westerly winds freshly or strongly on our west and south-west coasts. No general change later, but anticyclonic current dying out.

Barometer risen in Scotland, Scandinavia, Finland, and the Baltic, fallen elsewhere—most over the north of France and the south-east of England. Readings at 8 a.m. ranging from 30·2 ins. (1) over the north of Scandinavia, (2) in the Hebrides, and (3) over the north-west of Spain, to 29·8 ins. and less in a small but well-defined minimum over the eastern portion of the English Channel, and a similar value in a shallow area stretching from Frankfürt to Naples, and to below 29·7 ins. in the neighbourhood of Kharkov. Two former cyclonic systems merging later, and that near Kharkov moving westwards.

Monday, 15th June, 1903.

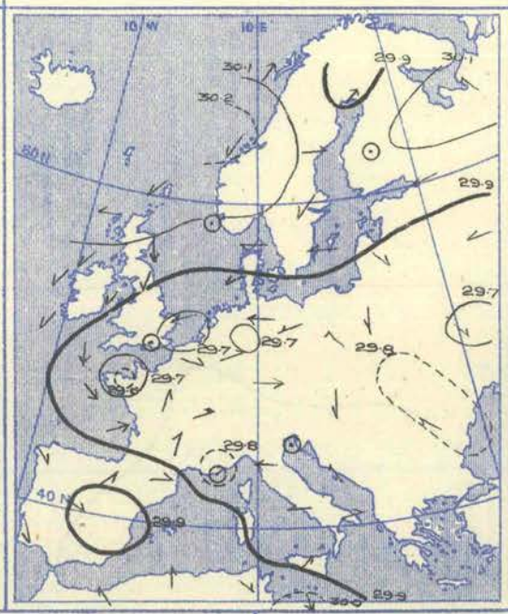
Temperature and Weather. 8 a.m.

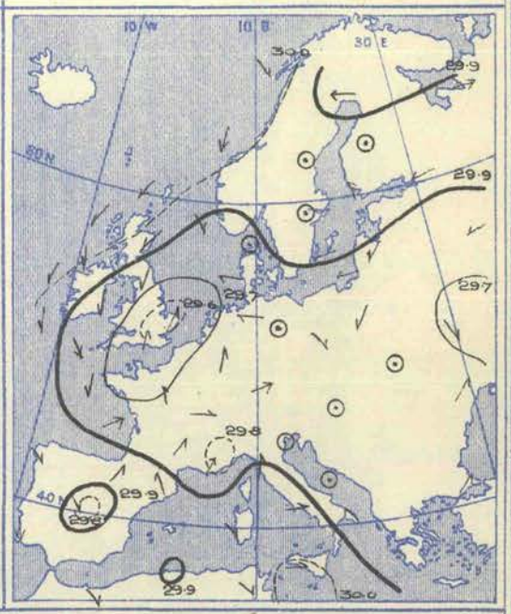


Weather in morning still rainy over the south of England, the Netherlands, and western Germany, and rain also falling at Fanö, Leghorn, and in some parts of central Europe. Cloudy or dull in most other regions, but fine in the extreme north, over Ireland, Scotland, and at some Spanish and Italian stations. Rain continuing all day over the southern counties of England, and considerable amounts falling over France and the Netherlands—heaviest falls, 0·76 in. in London and 1·22 ins. at Oxford.

Temperature very low for time of year over our Islands and France. Morning readings highest, 73° at Patras, 71° at Algiers, 66° in Little Russia, and 63° at Moscow and Prague. Lowest, 32° at Archangel, 45° at Bodö, 46° at Paris and Belfort, 49° in London and at Liverpool, 50° in the north of Scotland, and 53° at Cuxhaven, Frankfürt, and Munich. Maxima during day extremely low over the United Kingdom (54° in London and 53° at Oxford) but as high as 72° at Hernösand, and above 70° over central and southern Europe and in Algeria. Highest readings of all, 86° at Oran and 90° at Constantinople.

Barometer and Wind. 8 a.m. and 6 p.m.



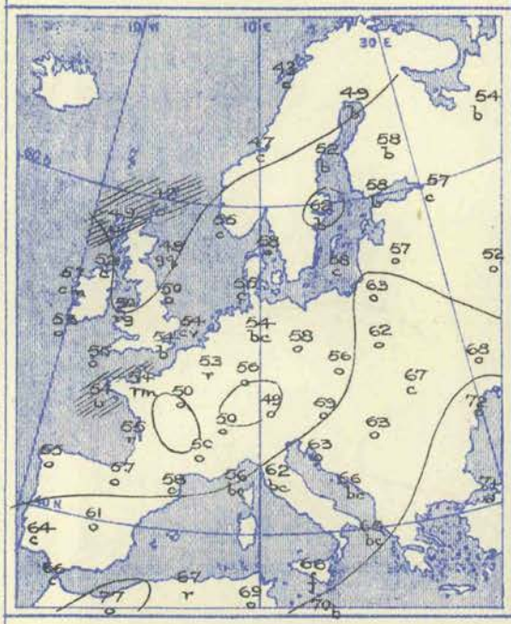


Wind in morning cyclonic very generally, the chief circulations being shown over the south of our Islands and the adjacent parts of the Continent. Of little strength as a whole, but North-Easterly and Easterly winds fresh or strong on some parts of our south-east and south-west coasts. No material change later.

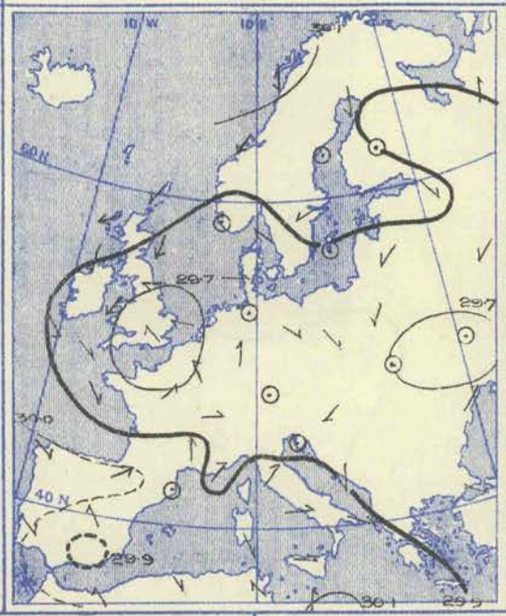
Barometer at 8 a.m. highest, about 30·20 ins. off the west of Norway, and nearly as high in the extreme north of Russia. Lowest, 29·7 ins. and less in a group of three minima lying to the southward or south-eastward of our Islands and in another system over Little Russia. Other disturbances of less importance found in the south-west of Europe and also over Lapland. Depressions undergoing considerable modification both in form and depth during day, and those near our Islands tending to move northwards. Northern anticyclones both giving way briskly, and a decrease of pressure taking place in most parts of our area.

Tuesday, 16th June, 1903.

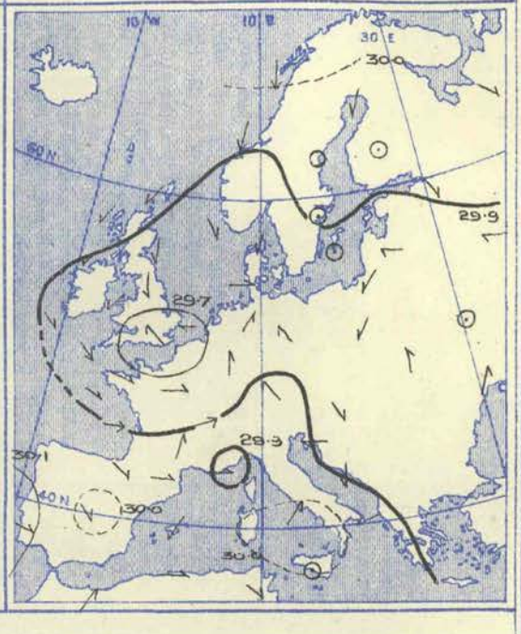
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in Finland, but cloudy or overcast in almost all other places. Rainy over France, Belgium, at several of our own south-western and western stations, and also at Algiers and Copenhagen. Rain falling later in most countries, but dry in most parts of Spain, Russia, as well as along the south and west coasts of France. Thunderstorm occurring in London and its vicinity.

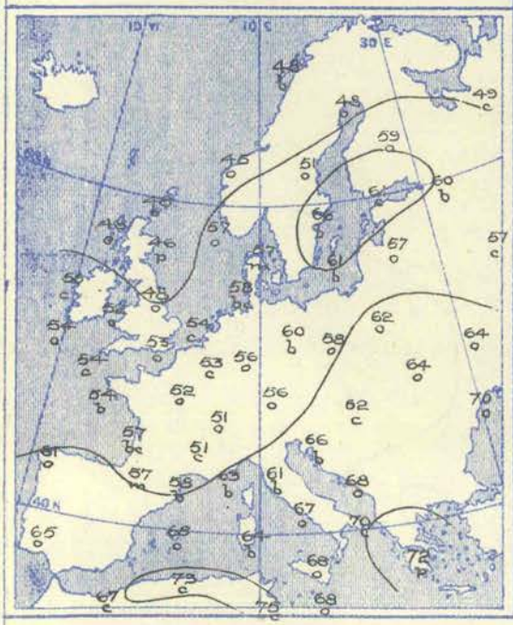
Temperature changed little and irregularly. Readings at 8 a.m. highest, 77° at Nemours, 74° at Nicolaieff, 71° at Constantinople, and 66° at Pesaro. Lowest, 43° at Bodö, 46° in the north of Scotland, 47° at Le Mans, 49° at Munich, Limoges, and Oxford, and 55° at Cape Sicié. Rising to about 80° at several stations in the extreme south during day, and to 70° or above in most parts of Austria-Hungary, Italy, and Spain, but only touching 57° at Paris, and remaining below 60° at most of our own stations. Maxima less than 50° in some parts of Scotland, and only 54° at Portland Bill.

Wind cyclonic very generally, the chief circulation being around a centre over the south of England. Light or moderate in force as a whole, but Easterly and Northerly currents fresh at some of our own stations. No decided change during day.

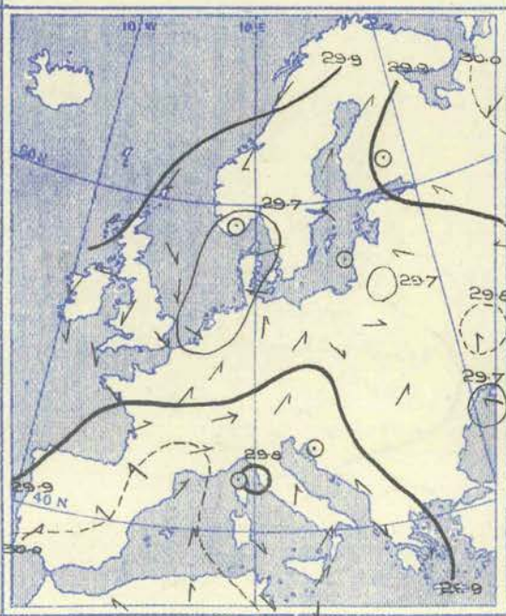
Barometer at 8 a.m. highest, 30·1 ins. (1) at Bodö, and (2) at Malta. Lowest, 29·6 ins. and less in a depression having its centre over Hampshire. No higher than 29·7 ins. in a shallow disturbance over the south of Russia. Latter system dispersing by evening, and that over England remaining almost stationary and beginning to fill up slowly. Very little change taking place over Europe as a whole, but pressure tending to increase slowly in most localities.

Wednesday, 17th June, 1903.

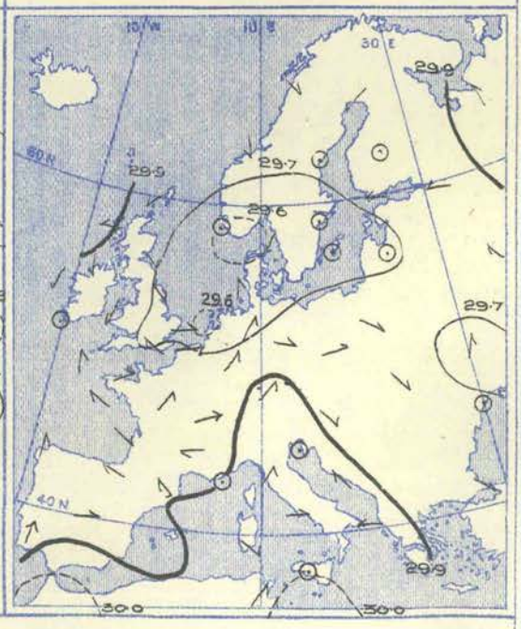
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m., cloudy or dull in nearly all regions except Greece, and at some Italian stations. Showery in a few British localities and rainy at Christiania. Rain falling in most northern countries later, and also at Barcelona and Lisbon, and thunderstorms occurring in London, at Biarritz, and the mouth of the Elbe. Heaviest rainfall, 0·87 in. at Shields, 1·5 ins. at Archangel, and 2·56 ins. at Lisbon.

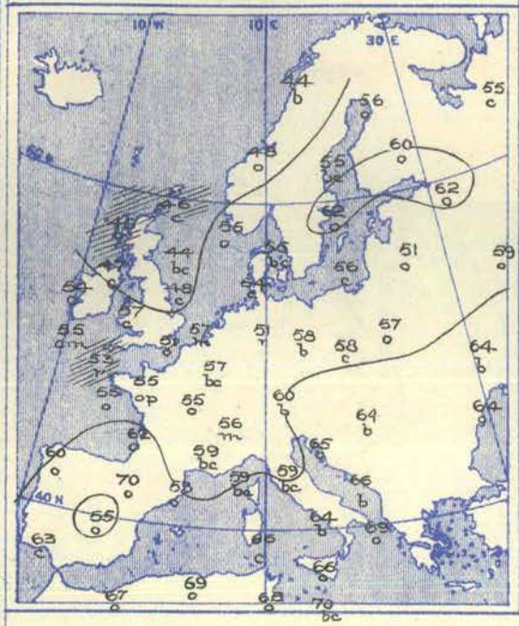
Temperature changed little and irregularly. Readings ranging from 75° at Sfax, 73° at Algiers, 72° at Athens, 70° at Brindisi and in the south of Russia, and 66° at Trieste and Stockholm, to 50° or below over the extreme north of Europe and in several parts of our Islands. Not exceeding 48° at Shields all day, but rising to 67° in London, to 70° or rather higher at some French, German, and Austrian stations, and in the south of Sweden, and to nearly 80° in some parts of Spain and Italy. Highest readings of all, 82° at Tunis and 85° at Malta.

Wind in morning showing numerous partial or complete circulations of light cyclonic winds, which continued to prevail, with slight modification throughout the day.

Barometer at 8 a.m., ranging from above 30·0 ins. over the greater part of Spain and Algeria, to below 29·7 ins. in a complex disturbance over the North Sea, and also in another system over the northern part of the Black Sea. Many other small and shallow depressions existing in various regions. Pressure decreasing in most places during day, the change being brisk over the Bay of Biscay and the Spanish Peninsula. A fresh cyclonic disturbance seen to be approaching the latter region by evening.

Thursday, 18th June, 1903.

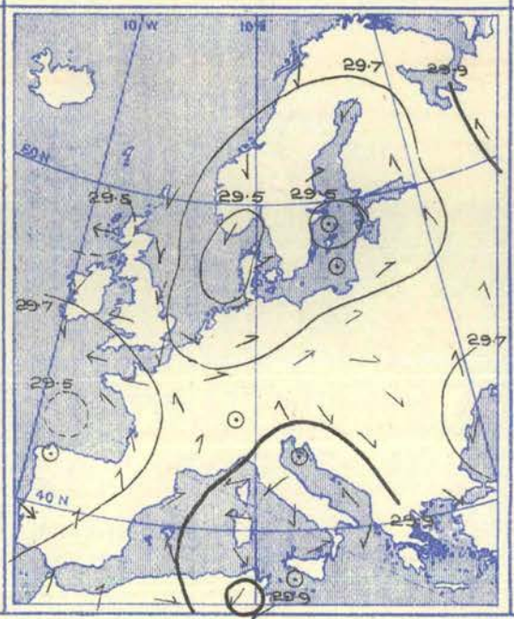
Temperature and Weather. 8 a.m.



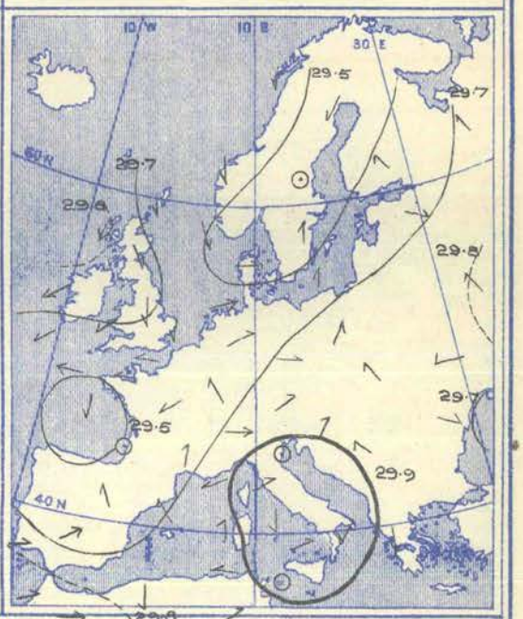
Weather at 8 a.m. cloudy or overcast in almost all parts, both of our Islands and continental Europe. Rainy at Oporto, Barcelona, Scilly and Jersey, and also at Cuxhaven. Heavy rain later over France, the west of Germany, north of Italy, and our own south-west coasts, and less considerable falls in Spain, Russia, Scandinavia, and the extreme north of our Islands. More than an inch over Brittany, the south of France, and at Turin. Thunder heard at Jersey and Le Mans.

Temperature fallen as a whole and continuing very low over the western countries. Morning readings ranging from 73° at Sfax, 70° at Constantinople and Biarritz, and 66° in the north of Finland and at Memel, to 50° or below in many parts of our Islands and the west of Norway. Lowest readings of all, 44° at Bodö and Aberdeen. Maxima during day as high as 72° at Stockholm, 73° at St. Petersburg, and above 70° over nearly the whole of southern and central Europe. Thermometer scarcely exceeding 60° in any part of our Islands, and not touching 55° in several localities.

Barometer and Wind. 8 a.m.



6 p.m.

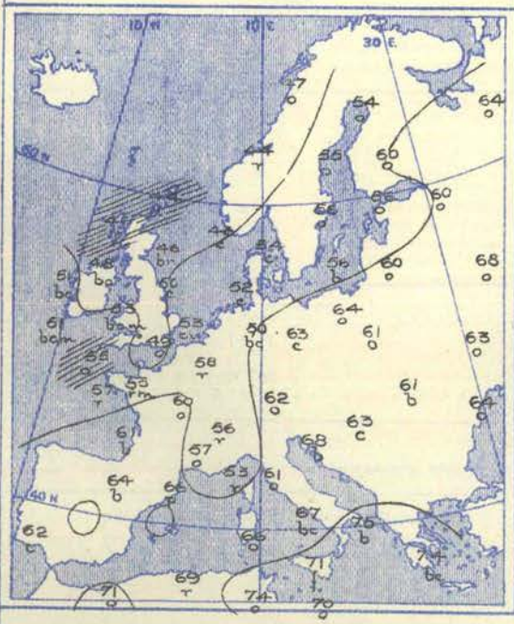


Wind in morning remaining cyclonic, the chief circulations being around Scandinavia and the North Sea, and the Bay of Biscay. Easterly current strong on our south-west coasts, and fresh at Malin Head and Stornoway, but little force elsewhere. Not much change in direction later, but strength increasing in different places.

Barometer at 8 a.m. ranging from above 29·9 ins. over the north-east of Russia, and also over Italy and its neighbourhood, and from above 29·8 ins. over the north-west of Scotland, to below 29·7 ins. in a shallow depression over southern Russia, and to below 29·5 ins. in three other minima,—one near Stockholm, another the south-west of Norway and the adjacent portion of the North Sea, and the third over the Bay of Biscay. Scandinavian disturbances moving north-eastwards during day, and becoming less well defined, and that over the Bay travelling steadily eastwards. Pressure giving way decidedly over the north of Russia.

Friday, 19th June, 1903.

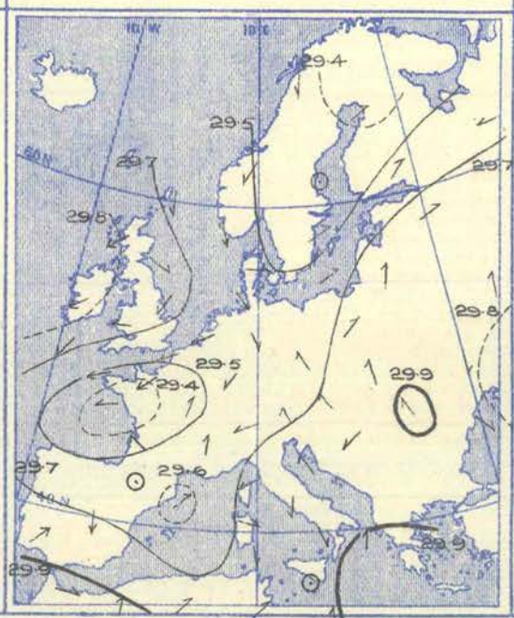
Temperature and Weather. 8 a.m.



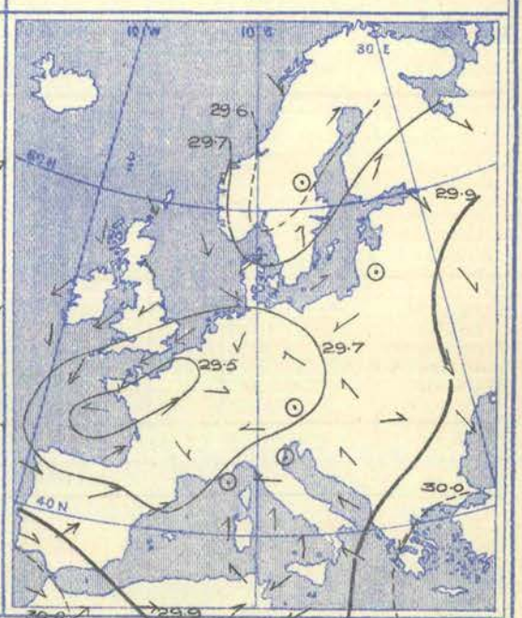
Weather in morning fine and bright over central Europe, Greece, and at several of our own western and northern stations, but cloudy or overcast over our area as a whole. Rainy at Christiansund, Stornoway, on the shores of the English Channel, in the east of France, the Riviera, and at Algiers. Very heavy rain during day over the north of Italy, the southern counties of England, and throughout France, and smaller quantities in most other regions. Heaviest fall, 2·64 ins. at Nice.

Temperature at 8 a.m. showing no decided or regular change. Readings ranging from 70° or a little higher on the southern shores of the Mediterranean, and at Barcelona, 68° at Moscow, and 64° at Archangel, to 53° at Nice and Madrid, to 50° or below in most parts of our Islands, and along the west coast of Norway. Remaining at or even below 50° at some of our southern stations all day, but rising to 70° or upwards in most parts of the Continent, and to above 80° in the most southern countries, as well as at Munich. Frost in Scotland during succeeding night.

Barometer and Wind. 8 a.m.



6 p.m.

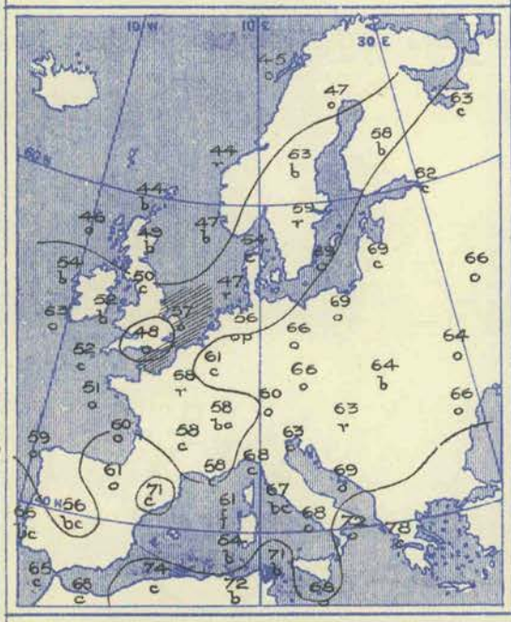


Wind continuing to show several cyclonic circulations, the chief swirl being around Brittany. Of little force generally, but the North-Easterly current blowing strongly over the south of England. Very little change later.

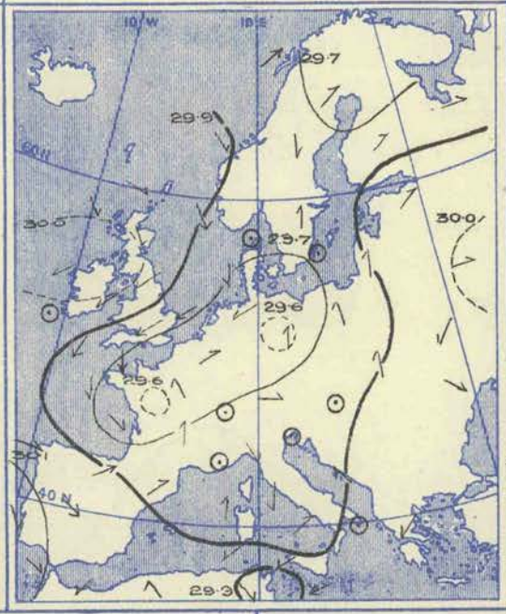
Barometer in morning ranging from 29·9 ins. and upwards (1) in the neighbourhood of Lemberg, (2) to the southward of Italy, and (3) over Morocco, and from above 29·8 ins. off our own north-west coasts to below 29·6 ins. in small depressions lying over Catalonia and the south-east of Russia, and to less than 29·4 ins. in two other systems—one of a complex character over Scandinavia, and the other over and to the westward of Brittany. Two last disturbances filling up somewhat during day, and that over Brittany at the same time moving slowly eastwards. An anticyclone beginning to spread over our north-western districts from the Atlantic. Russian and Mediterranean depressions disappearing.

Saturday, 20th June, 1903.

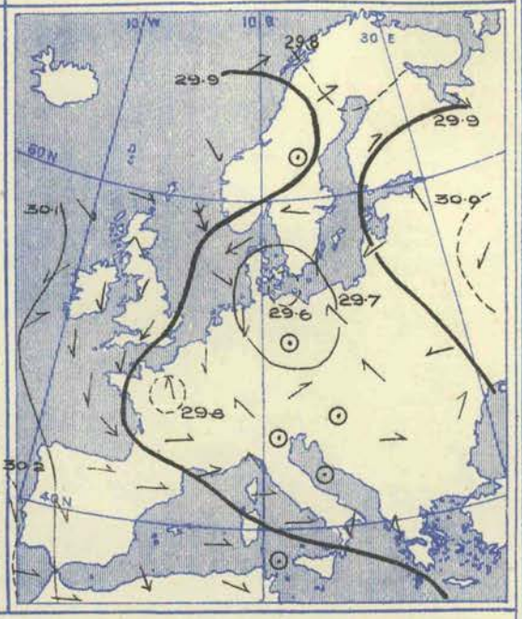
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over the major portion of our Islands, and in isolated parts of southern Europe; cloudy or dull elsewhere, with rain at Jersey, over Holland, Denmark, at some Scandinavian stations, and at Buda Pesth. Rather heavy rain later over Germany, Austria, the Netherlands, the east of France, and at some Scandinavian and Russian stations. Thunderstorms occurring at Nancy, Besançon, and Paris.

Temperature risen decidedly over Germany, changed but little in other countries. Morning readings highest, 78° in Greece, 76° at Palma, 74° at Algiers, 72° at Memel, 66° at Moscow, and 63° at Archangel. Highest in our Islands, 55° at Roche's Point. Lowest, 44° at Christiansund and Sumburgh Head, 46° at Oxford, 48° in London, 51° at Brest, 54° at Limoges, and 55° at Turin. Maxima during day only 53° in London, and below 56° in many parts of our Islands, but above 70° over the greater portion of Europe, and touching 80° in several places. Highest readings of all, 82° at Athens and 95° at Tunis. Maximum, 77° at St. Petersburg.

Wind at 8 a.m. showing a cyclonic circulation around France and Germany, the North-Easterly current over the south-eastern half of England being fresh or strong. Light anticyclonic airs prevailing over Ireland and Scotland. No general change later, but wind increasing to a fresh gale from North-North-West at Skudesnaes.

Barometer risen except in the centre of Europe—most in the north and west. Morning readings ranging from above 30·1 ins. over Portugal, and above 30·0 ins. over Ireland and Scotland, central Russia, and the Grecian Archipelago, to below 29·7 ins. in a large complex disturbance, with two minima, extending from the west of France to the Baltic, and in another system over Lapland. Pressure continuing to increase during day in the west and north, and complex depression breaking into two or three portions. Chief centre, less than 29·6 ins., lying near Copenhagen at 6 p.m.

IV.—GENERAL NOTES, etc.

The general character of the weather over Europe during this week was very unsettled, with persistent and heavy rains over our southern districts, and the neighbouring regions of the Continent, and occasional rain elsewhere—especially over the north of Italy and the south of France. The distribution of barometric pressure was complex, the level of the mercury low, and the cyclonic systems numerous, while the absence of sunshine, and the prevailing North-Easterly and Easterly winds caused temperature to become extremely low and unseasonable for the time of year over the United Kingdom, and, during the earlier days, in France also. During the night of Friday-Saturday, the sheltered thermometer at some Scotch stations fell considerably below the freezing point. Almost all parts of our area were visited by depressions, but the principal systems appeared over France and our own southern and south-eastern districts, while the regions least affected were, as a rule, those farthest removed from the centre of Europe, including our extreme north and north-west coasts. Thunderstorms were not common, but some were experienced in different parts of France, as well as over England and north Germany. By the end of the period the barometer was rising, except over the Baltic and the extreme south-east of Europe, and an anticyclone was appearing over all the most western countries.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 140.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	48·6	+13·8	38	+ 11	SHEFFIELD	11·6	—	10	—	WESTBOURNE	15·8†	−34·1	14†	− 30
STRATHPEFFER SPA	28·9	− 9·1	23	− 7	WORKSOP	12·8	− 24·6	11	− 21	VENTNOR HOSPITAL	14·4	−31·3	13	− 28
EDINBURGH	30·9	− 3·5	26	− 3	THURCASTON	10·4	− 30·0	9	− 26	BOURNEMOUTH	—	—	—	—
COCKLE PARK	34·3	—	29	—	TUNBRIDGE WELLS	19·3	—	17	—	MARLBOROUGH	16·0	−27·9	14	− 24
NEWCASTLE-ON-TYNE	29·8	—	25	—	MARGATE	19·1	− 24·0	17	− 21	SOUTHPORT	33·9	—	29	—
YORK	28·3	−11·7	24	− 10	BROADSTAIRS	—	—	—	—	RHYL	42·5	—	36	—
CROMER	13·4	—	12	—	RAMSGATE	—	—	—	—	ABERDOVEY	38·0†	—	33†	—
LOWESTOFT	13·7	—	12	—	EASTBOURNE	27·8	− 23·8	24	− 21	TENBY	—	—	—	—
HOLLESLEY BAY	13·7	—	12	—	BRIGHTON	27·0	− 25·4	24	− 22	TORQUAY	18·3	−37·1	16	− 33
DUNMOW	10·6	—	9	—	WORTHING	23·8	—	21	—	NEWQUAY	28·7	−24·2	25	− 21
					BOGNOR	19·9†	—	18†	—	GUERNSEY	14·6†	−44·6	13†	− 40
					WATERGATE PARK	15·9	—	14	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42 F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX., No. 18, p. 104	Hillington	—	—	—	44·3	51·0	+ 2·2	63	—	—	—	—	—	—	—	—
„ „ „ 19, p. 110	Newton Rigg	55	—	51·1	—	44·4	− 3·0	32	—	—	—	—	—	—	—	—
„ „ „ 20, p. 116	Shaftesbury	—	—	—	44·9	52·7	+ 1·5	75	—	—	—	—	—	—	—	—
„ „ „ 23, p. 134	Blacksod	—	48	—	53·4	57·7	+ 2·7	110	—	—	—	—	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 25.] *Third Series.* WEEK ENDING SATURDAY, JUNE 27TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 146.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	74	36	62·3	45·7	53·4	0 (average)	80	+ 4	0	− 1	652	− 40	491	− 47
	1. SCOTLAND, EAST	72	33	63·9	47·3	55·0	0 (average)	91	− 1	0	0	767	− 88	502	− 81
	2. ENGLAND, N.E.	82	33	65·5	48·9	56·6	0 (average)	102	+ 1	0	0	863	− 14	342	−137
	3. ENGLAND, EAST	83	37	67·4	48·1	57·1	1 below	106	− 8	0	0	1066	− 11	322	−203
	4. MIDLAND COUNTIES	84	33	69·1	47·7	57·7	0 (average)	110	− 3	0	0	1017	− 94	355	−180
	5. ENGLAND, SOUTH	84	35	66·5	49·5	57·4	1 below	108	−14	0	0	1154	− 41	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	71	35	64·0	47·7	55·3	1 below	93	− 4	0	0	895	− 33	317	− 96
	7. ENGLAND, N.W.	76	34	66·3	49·6	57·4	0 (average)	108	+ 2	0	0	982	− 9	259	−129
	8. ENGLAND, S.W.	80	36	64·4	49·1	56·2	2 below	99	−13	0	0	1166	+ 21	162	−138
	9. IRELAND, NORTH	69	43	61·6	50·3	55·5	1 below	95	− 4	0	0	925	− 89	286	− 61
	10. IRELAND, SOUTH	69	37	62·6	51·1	56·4	1 below	101	− 8	0	0	1181	− 12	183	− 67
	— CHANNEL ISLANDS	80	42	64·2	52·5	57·9	1 below	111	− 9	0	0	1364	+ 49	49	− 68

Rainfall.

	DISTRICTS. (See p. 146.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	7	0 (average)	118	+14	31·4	+10·4
	1. SCOTLAND, EAST	5	9	3 more	102	+13	17·2	+ 4·3
	2. ENGLAND, N.E.	3	3	2 less	85	+ 2	11·0	+ 0·7
	3. ENGLAND, EAST	0	—	5 less	77	− 7	12·0	+ 2·1
	4. MIDLAND COUNTIES	2	2	4 less	85	+ 5	15·0	+ 3·2
	5. ENGLAND, SOUTH	0	—	4 less	89	+10	15·2	+ 3·7
Principal Grazing Districts.	6. SCOTLAND, WEST	5	16	9 more	111	+19	29·1	+ 8·2
	7. ENGLAND, N.W.	4	13	7 more	103	+17	17·5	+ 4·0
	8. ENGLAND, S.W.	2	2	4 less	100	+11	20·9	+ 4·7
	9. IRELAND, NORTH	6	10	4 more	119	+14	19·7	+ 4·8
	10. IRELAND, SOUTH	6	28	22 more	110	+15	22·8	+ 5·3
	— CHANNEL ISLANDS	3	3	2 less	107	+15	14·6	+ 1·3

Bright Sunshine.

	DISTRICTS. (See p. 146.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	28	− 8	22	− 6	538	− 90	24	− 4
	1. SCOTLAND, EAST	21	−18	17	−15	574	−111	26	− 5
	2. ENGLAND, N.E.	38	− 7	32	− 6	626	− 77	28	− 4
	3. ENGLAND, EAST	60	+11	51	+10	737	− 60	33	− 3
	4. MIDLAND COUNTIES	43	+ 5	37	+ 4	619	− 68	28	− 3
	5. ENGLAND, SOUTH	62	+14	55	+12	765	− 35	35	− 2
Principal Grazing Districts.	6. SCOTLAND, WEST	25	−21	20	−18	642	− 79	29	− 4
	7. ENGLAND, N.W.	38	− 8	32	− 7	709	− 2	32	0
	8. ENGLAND, S.W.	43	−10	37	− 9	731	−110	33	− 5
	9. IRELAND, NORTH	11	−27	9	−22	578	−112	26	− 5
	10. IRELAND, SOUTH	17	−24	15	−21	655	−118	30	− 5
	— CHANNEL ISLANDS	59	+ 2	52	+ 2	873	− 83	40	− 4

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was almost exactly the reverse of that of the preceding period, the conditions being fine and dry over the greater portion of England, and extremely dull and wet over the northern and north-western districts. Thunderstorms occurred at many Scotch and at a few English and Irish stations during the latter half of the period.

Temperature was still low until towards the end of the week, when it rose quickly, and on Saturday attained a maximum of 84° in the Midland Counties and England S., and nearly as high a value in several other English districts, while in Scotland and Ireland the thermometer rose to about 70°. The lowest of the minima (registered on the 21st or 22nd) ranged from 33° in Scotland E., England N.E., and the Midland Counties, to 42° in the Channel Islands, and to 43° in Ireland N. At the beginning of the week sharp ground frosts were again experienced in some north-western localities. The temperature, taken as a whole, differed but little from the average; it was, however, again below rather than above it.

Rainfall exceeded the mean in Ireland, England N.W., and in most parts of Scotland; in most places the excess was large, especially in Ireland S., where the fall amounted to nearly five times as much as the normal. In many of the English districts the weather was almost or quite rainless.

Bright Sunshine was deficient generally, but showed an excess over central, southern, and eastern England, as well as in the Channel Islands. The percentage of the possible duration ranged from 55 in England S., 52 in the Channel Islands, and 51 in England E., to 37 in the Midland Counties and England S.W., to 17 in Scotland E., 15 in Ireland S., and to 9 in Ireland N.

Barometer and Wind. At the commencement of the week an anticyclone was passing across our Islands from the westward, and the wind was Northerly over the Kingdom generally, but had shifted to the South-Eastward in the west of Ireland. By Tuesday the high pressure was lying to the eastward of our Islands, and the winds had consequently become Southerly or South-Easterly over the whole Kingdom. Cyclonic disturbances now began to arrive off our western coasts from the Atlantic, but, although they caused a considerable increase of wind and heavy rain at times over Ireland and the west of Great Britain, the weather over the greater part of England continued under the influence of the Continental high pressure system.

173 | 70 290 | 90 Wy. & S. Ltd 12 | 02

II.—DATA from which the SUMMARY on page 145 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°.	Below 42°.							
		°	°	°	°	°		°	°		Inches.	Inches.				
C. SCOTLAND, N.	Sumburgh Head Ⓢ	60	39	54·4	44·9	49·3	− 1·1	51	0	2	0·73	+ 0·27	*	*	*	*
	Stornoway Ⓢ	71	39	62·9	44·4	53·0	+ 0·2	77	0	3	0·44	− 0·13	31·9	− 8·3	25	− 7
	Wick Ⓢ	70	38	60·1	46·1	52·6	− 0·4	74	0	5	0·18	− 0·26	*	*	*	*
	Lairg Ⓢ	74	36	67·3	45·0	55·4	+ 2·2	94	0	5	0·52	− 0·03	*	*	*	*
	Glencarron Ⓢ	68	37	63·4	43·6	52·8	− 1·3	76	0	5	1·11	− 0·07	*	*	*	*
	Fort Augustus Ⓢ	68	40	64·2	47·2	55·1	− 0·4	92	0	6	1·19	+ 0·63	19·0	− 9·7	15	− 8
	Fort William Ⓢ	67	40	63·7	48·8	55·7	+ 0·4	96	0	6	0·59	− 0·38	28·6	− 9·4	23	− 8
1. SCOTLAND, E.	Nairn Ⓢ	72	40	66·0	45·4	55·0	− 0·4	91	0	6	1·13	+ 0·67	*	*	*	*
	Aberdeen Ⓢ	62	38	59·7	46·1	52·4	− 2·3	73	0	4	0·63	+ 0·16	23·7	− 18·9	19	− 15
	Braemar Ⓢ	67	33	62·4	43·7	52·4	− 0·7	73	0	4	0·45	− 0·12	*	*	*	*
	Ochtertyre Ⓢ	71	42	65·7	49·6	57·1	+ 0·3	106	0	4	1·80	+ 1·12	*	*	*	*
	Leith Ⓢ	70	45	65·9	51·6	58·3	+ 1·6	114	0	5	0·73	+ 0·26	*	*	*	*
	Marchmont Ⓢ	—	—	—	—	—	—	—	—	6	0·50	− 0·13	25·3	− 15·5	21	− 13
2. ENGLAND, N.E.	Alnwick Castle	69	34	65·1	47·9	55·9	+ 0·9	97	0	4	0·48	0·00	*	*	*	*
	Durham	69	33	65·7	47·9	56·2	− 0·5	99	0	4	0·42	− 0·07	30·2	− 8·6	25	− 7
	Shields	65	38	63·0	50·1	56·1	+ 0·7	99	0	3	0·76	+ 0·31	*	*	*	*
	Scarborough Ⓜ	74	40	64·0	46·8	54·8	− 1·7	90	0	4	0·09	− 0·42	40·1	—	34	—
	Spurn Head	68	45	63·7	52·0	57·4	+ 0·3	108	0	1	0·02	− 0·34	*	*	*	*
	Fulbeck (Lincolnshire)	82	35	71·4	48·6	59·2	+ 0·7	120	0	2	0·06	− 0·41	50·5	—	43	—
3. ENGLAND, E.	Hillington Ⓜ	82	39	71·4	47·7	58·7	+ 0·2	117	0	0	0·00	− 0·54	56·3	+ 11·0	49	+ 9
	Yarmouth	66	42	61·7	50·4	55·7	− 1·8	96	0	0	0·00	− 0·47	*	*	*	*
	Geldeston	78	37	68·3	47·5	57·2	− 0·8	106	0	0	0·00	− 0·43	58·7	+ 10·0	51	+ 9
	Cambridge	83	38	72·8	47·1	59·1	− 0·5	120	0	0	0·00	− 0·50	55·8	+ 9·8	48	+ 9
	Felixstowe	67	41	62·3	50·9	56·2	− 1·8	99	0	0	0·00	—	76·5†	—	67†	—
	Rothamsted	81	37	68·5	45·7	56·3	− 2·0	100	0	0	0·00	− 0·52	59·3	+ 14·0	52	+ 12
	Shoeburyness	77	40	67·1	47·6	56·7	− 2·2	103	0	0	0·00	− 0·37	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	75	35	67·4	47·8	56·9	+ 0·9	104	0	4	0·73	+ 0·08	41·9	—	36	—
	Bawtry (Hesley Hall)	83	35	72·7	48·1	59·5	+ 1·2	123	0	3	0·13	− 0·41	*	*	*	*
	Loughborough	84	33	70·9	46·9	58·1	− 1·3	113	0	2	0·25	− 0·25	*	*	*	*
	Colly Weston (Stamford)	82	38	72·3	48·3	59·5	+ 0·6	123	0	2	0·07	− 0·40	*	*	*	*
	Cheadle Ⓜ	78	39	66·9	48·9	57·3	+ 1·1	107	0	2	0·19	− 0·48	*	*	*	*
	Birmingham (Edgbaston)	80	38	67·9	49·1	57·9	+ 0·1	111	0	1	0·03	− 0·57	28·6	—	25	—
	Churchstoke Ⓜ	79	33	67·9	46·6	56·5	+ 0·1	102	0	3	0·29	− 0·22	39·0	− 5·4	34	− 5
	Hereford Ⓜ	79	36	68·1	46·0	56·3	− 2·6	100	0	1	0·04	− 0·43	*	*	*	*
	Cirencester	80	36	68·1	45·9	56·2	− 1·4	99	0	2	0·02	− 0·51	53·3	+ 7·6	46	+ 7
	Oxford	83	38	69·1	49·0	58·4	− 0·7	115	0	0	0·00	− 0·51	53·6	+ 8·1	47	+ 7
5. ENGLAND, S.	London	84	40	72·0	48·6	59·5	− 1·2	123	0	0	0·00	− 0·46	53·2‡	+ 10·9‡	46‡	+ 10‡
	Swarraton (Alresford) Ⓜ	81	35	68·3	45·6	56·2	− 1·0	99	0	0	0·00	− 0·48	*	*	*	*
	Dungeness	76	40	63·7	51·0	56·9	− 1·9	104	0	0	0·00	− 0·32	67·9	—	60	—
	Hastings (St. Leonards)	77	44	64·9	51·2	57·6	− 1·1	109	0	0	0·00	− 0·41	68·0	+ 15·0	60	+ 13
	Southampton	82	41	69·4	50·3	59·2	− 1·2	120	0	0	0·00	− 0·45	64·2	+ 14·0	56	+ 12
	Portland Bill	69	45	62·3	50·6	56·0	− 2·0	98	0	1	0·01	—	*	*	*	*
	Shaftesbury Ⓜ	76	42	64·8	49·1	56·4	− 0·8	101	0	1	0·01	− 0·53	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	70	39	65·7	47·0	55·7	− 0·3	96	0	4	0·89	− 0·09	*	*	*	*
	Glasgow	66	41	62·7	50·9	56·4	+ 0·2	101	0	6	1·36	+ 0·69	19·1	− 17·3	16	− 14
	Cally Ⓢ	69	35	64·4	44·8	53·9	− 1·9	83	0	6	2·35	+ 1·58	*	*	*	*
	Aspatria	71	41	66·2	50·2	57·6	+ 2·0	109	0	4	0·87	—	30·9	—	26	—
	Douglas (Isle of Man)	64	35	60·9	45·8	52·8	− 3·1	76	0	6	2·53	+ 1·96	23·6	− 25·6	20	− 22
7. ENGLAND, N.W	Newton Rigg	70	35	64·1	46·2	54·5	− 1·1	88	0	5	0·95	—	39·5	—	33	—
	Stonyhurst	70	36	66·4	49·1	57·2	+ 0·1	106	0	4	1·88	+ 1·08	34·5	− 9·3	29	− 8
	Blackpool Ⓜ	71	35	67·3	49·7	57·9	+ 0·2	111	0	4	1·50	+ 0·96	35·7	− 8·6	30	− 7
	Manchester (Prestwich)	76	34	69·4	48·5	58·2	+ 1·1	113	0	4	1·18	+ 0·45	37·9	—	32	—
	Liverpool Obsy. (Bidston)	70	45	67·0	51·6	58·3	+ 0·4	118	0	4	1·47	+ 0·96	39·8	—	34	—
	Chester (Hawarden Bridge)	74	41	67·7	49·6	58·0	− 0·4	112	0	3	0·61	—	*	*	*	*
	Llandudno Ⓜ	70	43	66·4	51·0	58·2	− 0·1	113	0	5	0·49	+ 0·02	37·7	− 7·4	32	− 6
	Holyhead	66	45	62·0	51·3	56·3	− 0·8	100	0	4	2·08	+ 1·62	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	60	45	58·3	51·6	54·7	− 2·2	89	0	5	0·59	+ 0·12	21·5	− 31·0	19	− 27
	Clifton	80	42	68·3	50·6	58·8	− 0·1	118	0	0	0·00	− 0·54	*	*	*	*
	Bath	?75	37	67·6	46·1	56·1	− 3·3	99	0	1	0·02	− 0·50	48·0	—	42	—
	Arlington (N. Devon)	78	38	65·0	47·6	55·7	− 1·2	96	0	3	0·14	− 0·63	*	*	*	*
	Cullompton Ⓜ	78	36	67·4	45·9	55·9	− 3·0	97	0	3	0·09	− 0·44	46·4	+ 0·8	41	+ 1
	Falmouth	67	48	62·2	52·3	56·9	− 1·4	104	0	2	0·20	− 0·38	45·8	− 7·9	40	− 7
	Plymouth	68	42	62·3	49·7	55·6	− 3·8	95	0	2	0·12	− 0·35	50·8	+ 0·8	45	+ 1
9. IRELAND, N.	Malin Head	64	44	60·7	51·0	55·5	0·0	95	0	7	0·39	− 0·16	*	*	*	*
	Edenfel (Omagh)	65	44	62·4	49·6	55·6	− 0·1	95	0	6	1·52	+ 0·83	*	*	*	*
	Blacksod Point	66	44	61·9	52·0	56·6	+ 0·1	102	0	7	1·41	+ 0·77	*	*	*	*
	Markree Castle	69	46	63·5	50·8	56·7	+ 1·1	103	0	6	0·53	− 0·23	12·6	− 24·1	11	− 20
	Armagh	65	45	61·9	49·3	55·2	− 1·3	92	0	5	0·94	+ 0·34	9·1	− 28·9	8	− 24
	Donaghadee	63	43	59·0	48·9	53·6	− 2·5	81	0	5	1·33	+ 0·80	*	*	*	*
10. IRELAND, S.	Dublin	66	46	63·3	51·5	57·0	− 1·5	105	0	6	2·16	+ 1·69	18·4	− 25·1	16	− 22
	Birr Castle	67	?42	63·7	45·0	53·7	− 3·4	82	0	6	1·24	+ 0·66	15·7	− 21·8	13	− 19
	Kilkenny	65	37	61·1	49·0	54·6	− 3·0	88	0	7	3·87	+ 3·31	*	*	*	*
	Waterford	66	40	60·6	51·7	55·8	− 1·7	97	0	5	4·95	+ 4·32	*	*	*	*
	Roche's Point	63	43	59·9	52·9	56·2	− 2·1	99	0	6	4·43	+ 3·76	*	*	*	*
	Valencia	68	51	62·7	53·6	57·8	+ 0·5	111	0	7	3·09	+ 2·29	17·5	− 26·0	15	− 23
	Killarney	69	47	63·8	52·4	57·7	+ 0·7	110	0	4	1·80	+ 1·13	*	*	*	*
	Foynes	69	51	65·3	52·5	58·5	+ 1·4	116	0	5	0·86	+ 0·24	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	49	61·3	53·0	56·9	− 1·4	104	0	5	0·45	+ 0·02	28·9	− 27·1	26	− 24
	Jersey	80	42	67·0	51·9	58·9	− 0·9	118	0	1	0·08	− 0·37	75·3	+ 18·3	67	+ 16

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

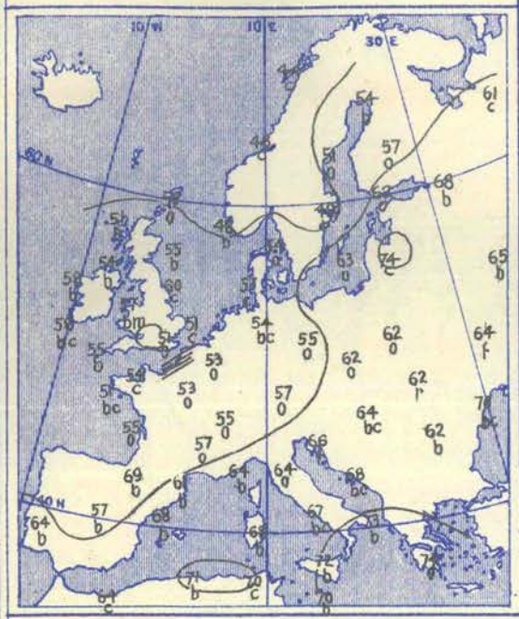
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 21st June, 1903.

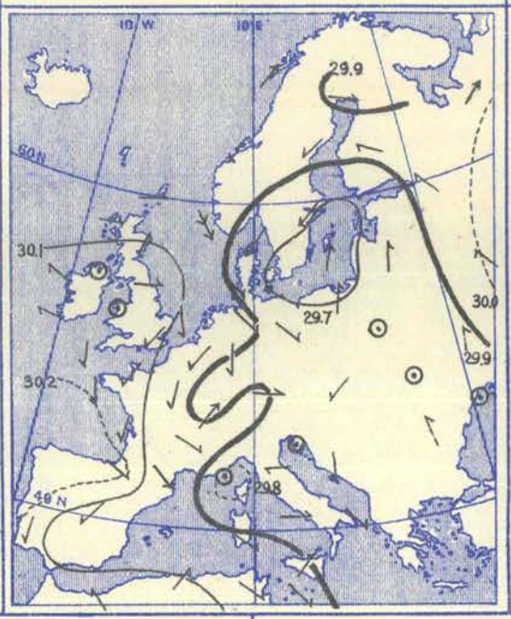
Temperature and Weather.

8 a.m.

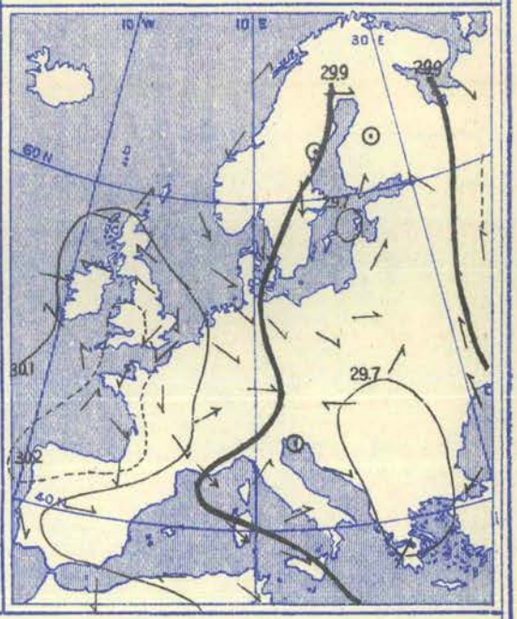


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright in most regions, but cloudy or dull in many parts of central and northern Europe, with rain at Lemberg and in the south of Sweden. Rain falling later at stations in Germany, Austria-Hungary, Poland, and the east of France, as well as on our extreme western coasts, and over Finland, but weather remaining fair as a whole.

Temperature risen somewhat over the United Kingdom and in some Russian localities, changed little or fallen elsewhere. Ranging in morning from 74° at Athens and Riga, 73° at Brindisi, about 70° in Algeria and the south of Russia, and 68° at St. Petersburg and Pesaro, to 53° at Paris, 51° in London and at Limoges, and 44° at Bodö. Rising later to 86° at Constantinople and in Greece, to 82° at Buda-Pesth, and to nearly 80° in some other southern localities, but only touching 58° at Paris, and remaining below 60° in several parts of England and Scotland. Rising to 70° (locally) at Leith.

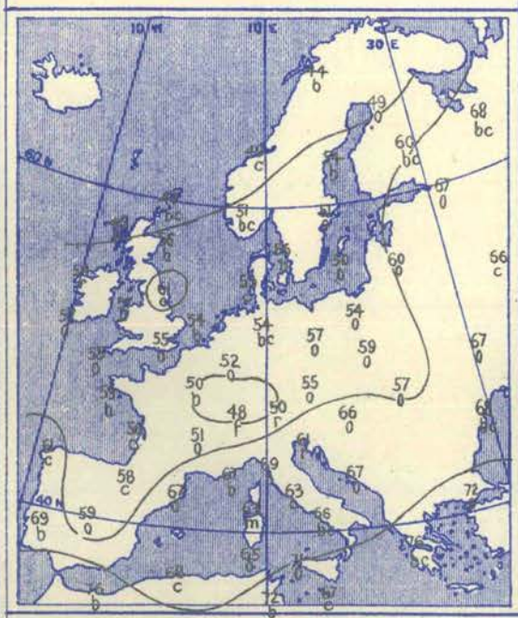
Wind in morning showing a general circulation around central and south-eastern Europe, the Northerly current in the south of Norway being strong to a gale in force. Light airs from the south-eastward prevailing over the south and west of Ireland. Northerly gale springing up at Stockholm by evening, and South-Easterly wind in Ireland increasing in strength and extending to the west coasts of England.

Barometer at 8 a.m. ranging from 30·2 ins. over the Bay of Biscay, and above 30·0 ins. over central Russia to 29·8 ins., and to 29·7 ins. and less in an elongated area extending from the south of Sweden to Greece, and to about 29·7 ins. in a small minimum over the Gulf of Genoa. Latter system almost dispersing by evening and the former moving slightly eastwards. An anticyclone moving eastwards across England and barometer beginning to fall again in Ireland.

Monday, 22nd June, 1903.

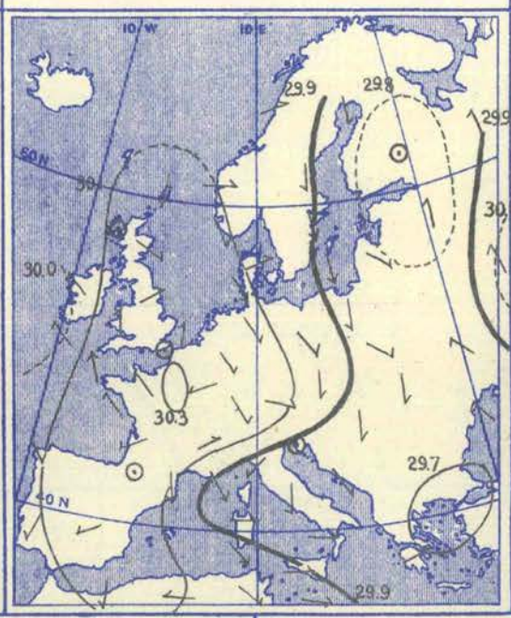
Temperature and Weather.

8 a.m.

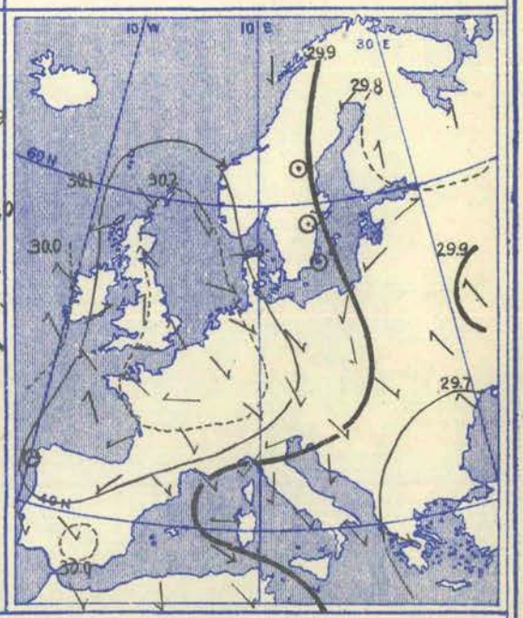


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright in most parts of Great Britain, France, and the extreme south-east of Europe, cloudy or overcast in most other localities, and rainy on the west coast of Ireland, at Ulcaborg, Trieste, Pesaro, and Munich. Heavy rain experienced later in Ireland and Italy, and slight falls in Scotland and at a few French stations.

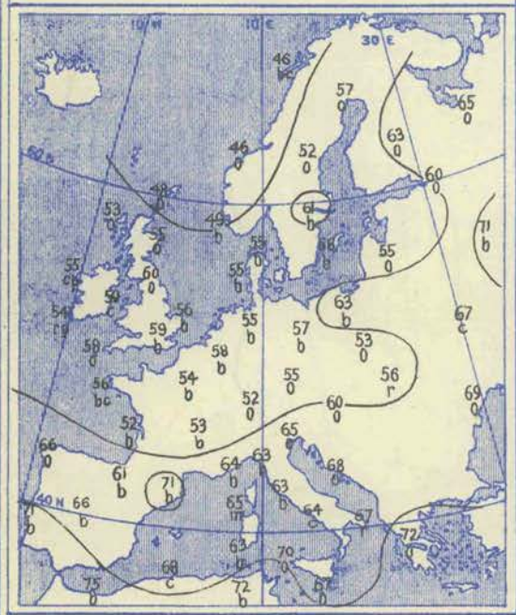
Temperature risen over Great Britain, Scandinavia, and northern Russia, fallen generally elsewhere. Morning readings highest, (1) 76° at Patras and Oran, 71° at Palermo, (2) 68° to 66° in Portugal, (3) 68° at Archangel, and 67° at St. Petersburg. Highest in our Islands, 61° at Shields and 60° at Leith. Lowest, (1) 44° at Bodö, 47° at Sumburgh Head, (2) 48° at Belfort, and 50° at Paris and Munich, (3) 50° in Gothland. Rising during day to 68° at Leith, 69° in London, to 77° at St. Petersburg, and to between 70° and 80° over southern Europe and Algeria. Maxima at Belfort and Munich no higher than 54° and 55° respectively.

Wind at 8 a.m. light and anticyclonic over the United Kingdom, France, and the North Sea, but cyclonic over Europe as a whole. Light in force generally, but Northerly breeze blowing strongly on the western shores of the Baltic. Anticyclonic circulation being gradually transferred further east during day, and freshening South-Easterly breezes setting in in Ireland.

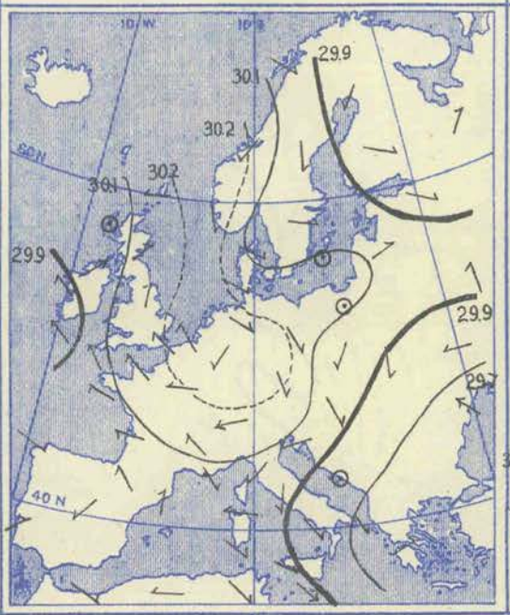
Barometer at 8 a.m. rising generally, but falling in Ireland, Portugal, and over the Bay of Biscay. Readings ranging from 30·2 ins. to 30·3 ins. in a large anticyclone stretching from the south-west of France to the south of Scotland, to 29·8 ins. and less in an oval-shaped depression lying over Finland and the Baltic Provinces, and to below 29·7 ins. in another system between Greece and Constantinople. Anticyclone and depressions all drifting eastwards during day, and another low pressure area approaching Ireland.

Tuesday, 23rd June, 1903.

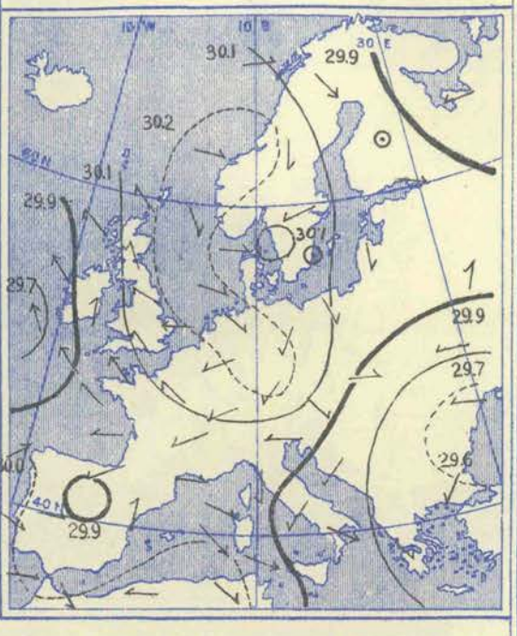
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning rainy in several parts of Ireland and Scotland, as well as at Vienna, Leghorn, and Brindisi, but fair or fine over our area as a whole. Rain falling later over our west and north coasts generally, and also at various scattered places on the Continent. Heaviest amount 0·87 in. at Valencia Island.

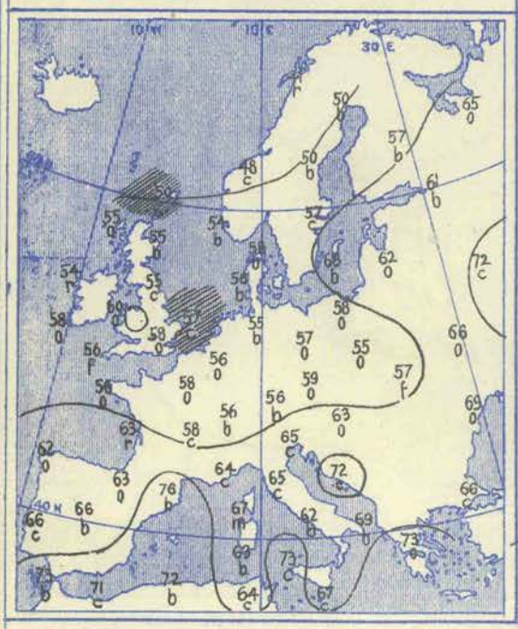
Temperature changed irregularly. Morning readings ranging from 75° at Oran, 72° at Athens, and 71° at Lisbon and Moscow, to 60° at North Shields, 54° at Paris, 52° at Munich, and 46° on the west coast of Norway. Rising during day to 70° in London, 72° at Stockholm, to about 80° in most parts of southern Europe and on the coast of Algeria. Highest readings of all 90° at Madrid and San Fernando, and 108° at Biskra (central Algeria).

Wind light and anticyclonic in most regions, but light and cyclonic over the north-east and south-east of Europe, and a strong South-Easterly wind prevailing on our south-west coasts. Anticyclonic circulation becoming somewhat restricted in area by evening, and the South-Easterly winds on our south-west coasts increasing in strength and extending further to the eastward.

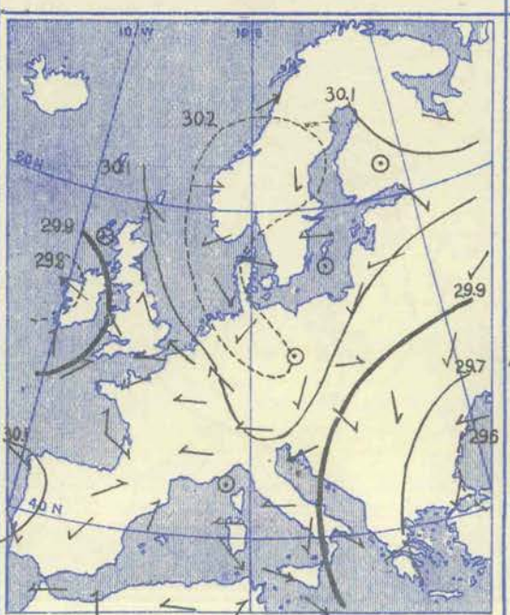
Barometer fallen generally, but risen within a broad band stretching from Scandinavia to Italy. Readings in morning ranging from above 30·2 ins. in an anticyclonic area embracing western Germany, the Netherlands, the east of England, and extending northwards to Norway, to below 29·9 ins. in a depression off Ireland, to less than 29·8 ins. over the north of Russia, and to 29·7 ins. and less over Turkey and the Black Sea. Irish disturbance moving steadily eastwards later, and anticyclone giving way slowly on its western side. A depression forming over Spain.

Wednesday, 24th June, 1903.

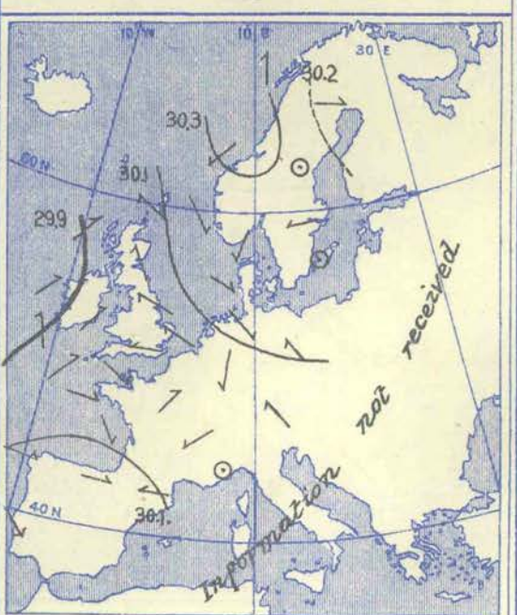
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or overcast over our Islands generally, with rain at Blacksod Point and Pembroke, fair at most of the Continental stations, but rain reported from Bodö and Rochefort, as well as at Nicolaieff. Rain later over Ireland and the greater part of Scotland; nearly half-an-inch falling at Parsonstown during a thunderstorm.

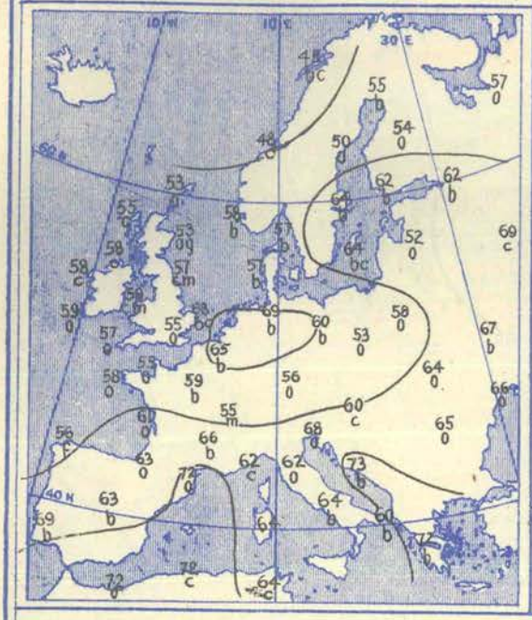
Temperature changing very little over our Islands, but a tendency to increase shown over the Continent generally. Morning readings highest, 76° at Barcelona, exceeding 70° over Algeria, and also in Greece and central Russia. Highest in our Islands, 62° at Oxford. Lowest, 41° at Bodö, 48° at Christiansund, and 50° at Hernösand. Lowest in our Islands, 50° at Sumburgh Head, and 53° at Wick. Rising during day to 60° and above over our Islands, and reaching 70° at Liverpool and in London, exceeding 70° over central and southern France, and touching 76° at Paris and Lyons, and 77° at Perpignan.

Wind, moderate to light from East over France and Germany, but chiefly from the South-ward or South-Eastward in our Islands, light from the North-Eastward over Russia and eastern Europe, light and variable at the Mediterranean stations. No material change later.

Barometer falling in Scotland and the north of Ireland, as well as in some parts of Austria and Russia, rising in most other places. Readings highest, 30·2 ins. and upwards in an anticyclone lying over the North Sea and the greater part of Scandinavia, and 30·1 ins. and more in another area off the Portuguese coast. Lowest, 29·6 ins. and less in a cyclonic system over the Black Sea, and 29·8 ins. and less in a shallow area lying off the west of Ireland. No change of importance later, but barometer rising slowly in most places.

Thursday, 25th June, 1903.

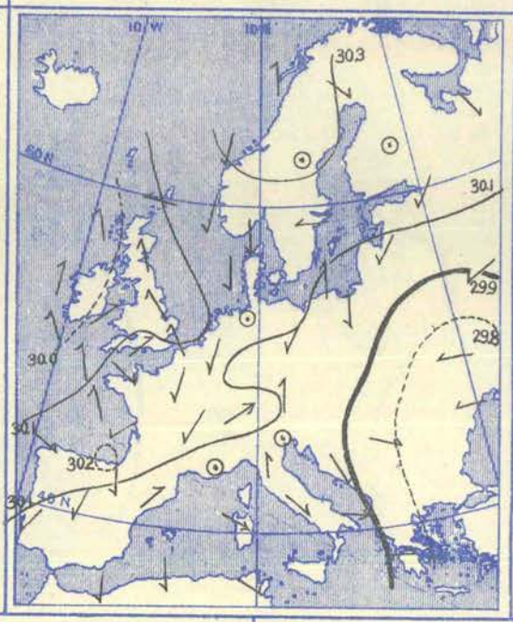
Temperature and Weather. 8 a.m.

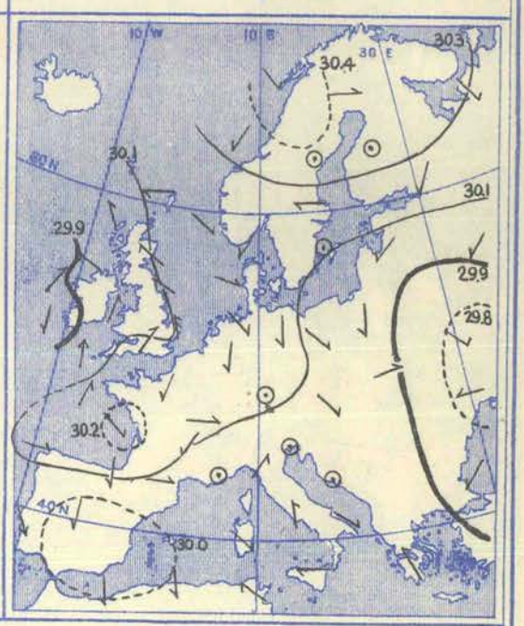


Weather in morning cloudy or dull in a few places, with showers at Pembroke and rain at Nairn, but fair or fine over Europe as a whole. Continuing fine and dry as a whole during day, but some slight rain falling in several parts of central Europe, and heavier amounts, with thunder and lightning in places on our own western coasts—as much as 0·65 in. at Holyhead, and 1·68 ins. at Roche's Point.

Temperature showing an upward tendency. Morning readings ranging from 79° at Palma, about 72° on the coast of Algeria, in Greece, and in the south of France, 69° at Moscow, and 64° at Stockholm, to 50° at Hernösand, and 45° at Bodö. Maxima during day as high as 73° in London, and to above 80° in many parts of southern Europe and the north-east of Africa. Highest readings, 86° at Marseilles, 93° at Madrid, and 100° at Aumale. Thermometer remaining below 60° at some of our northern stations, but exceeding 70° in the south of Sweden.

Barometer and Wind. 8 a.m. and 6 p.m.



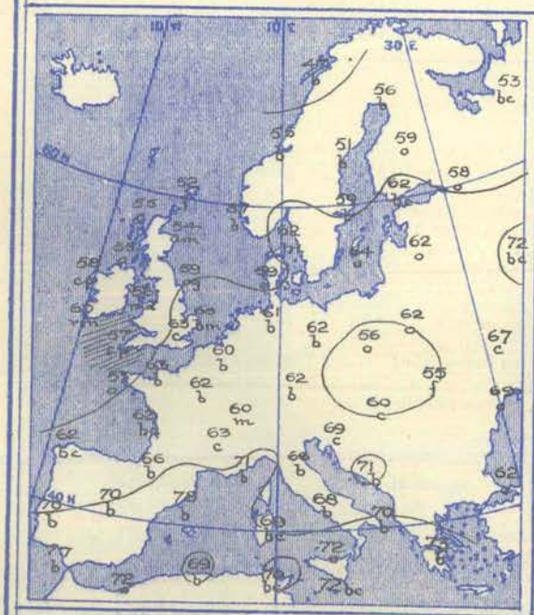


Wind light or moderate from some Southerly point over the major portion of our Islands, and cyclonic (light) in the south-east of Europe. Light and rather variable elsewhere, but mainly Easterly in the north. Wind increasing somewhat in force on our west coasts by evening. Very little change elsewhere.

Barometer risen except over Germany and Denmark. Ranging at 8 a.m. from above 30·0 ins. over the north of Scandinavia, to less than 30·0 ins. over and to the westward of Ireland, and to nearly 29·7 ins. in a depression over the Black Sea. No great change in the distribution of pressure later; barometer rising still higher over Scandinavia and falling somewhat in Ireland and the extreme south-west of England.

Friday, 26th June, 1903.

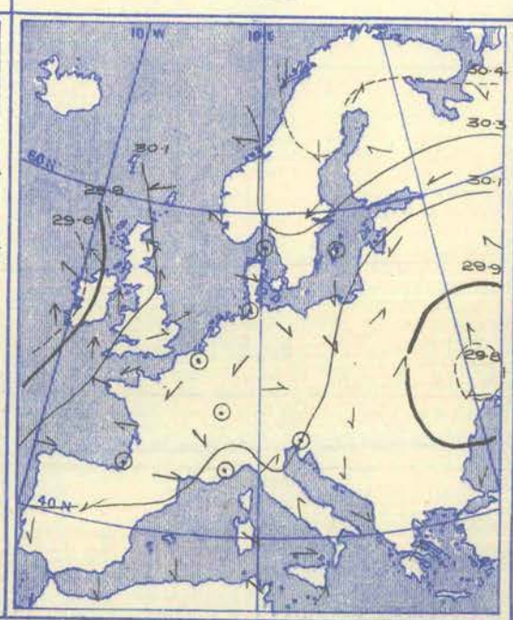
Temperature and Weather. 8 a.m.

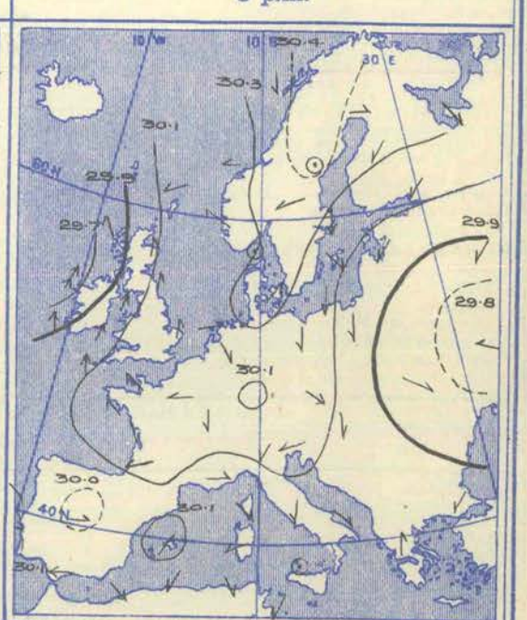


Weather in morning fine and bright generally but cloudy and misty on our northern coasts, and rainy along our western coasts, as well as at Buda-Pesth. Remaining fine all day in most parts of our area, but some rain falling in various parts of Russia and north Germany, and heavy amounts over our western and northern districts—0·46 in. at Shields, 0·85 in. at Liverpool, and 1·14 ins. at Holyhead.

Temperature risen in most places. Morning readings highest, (1) 78° at Barcelona, 77° at San Fernando, 73° in Greece, and 71° at Nice and Lesina, (2) 72° at Moscow, (3) 63° in London, and 60° at Leith. Lowest, 47° at Bodö, 53° at Archangel, 51° at Wick, and 54° at Donaghadee. Rising subsequently to about 70° in the Hebrides, 77° in London and at Berlin, and to above 80° in most parts of southern Europe. Highest reading of all, 97° at Madrid.

Barometer and Wind. 8 a.m. and 6 p.m.





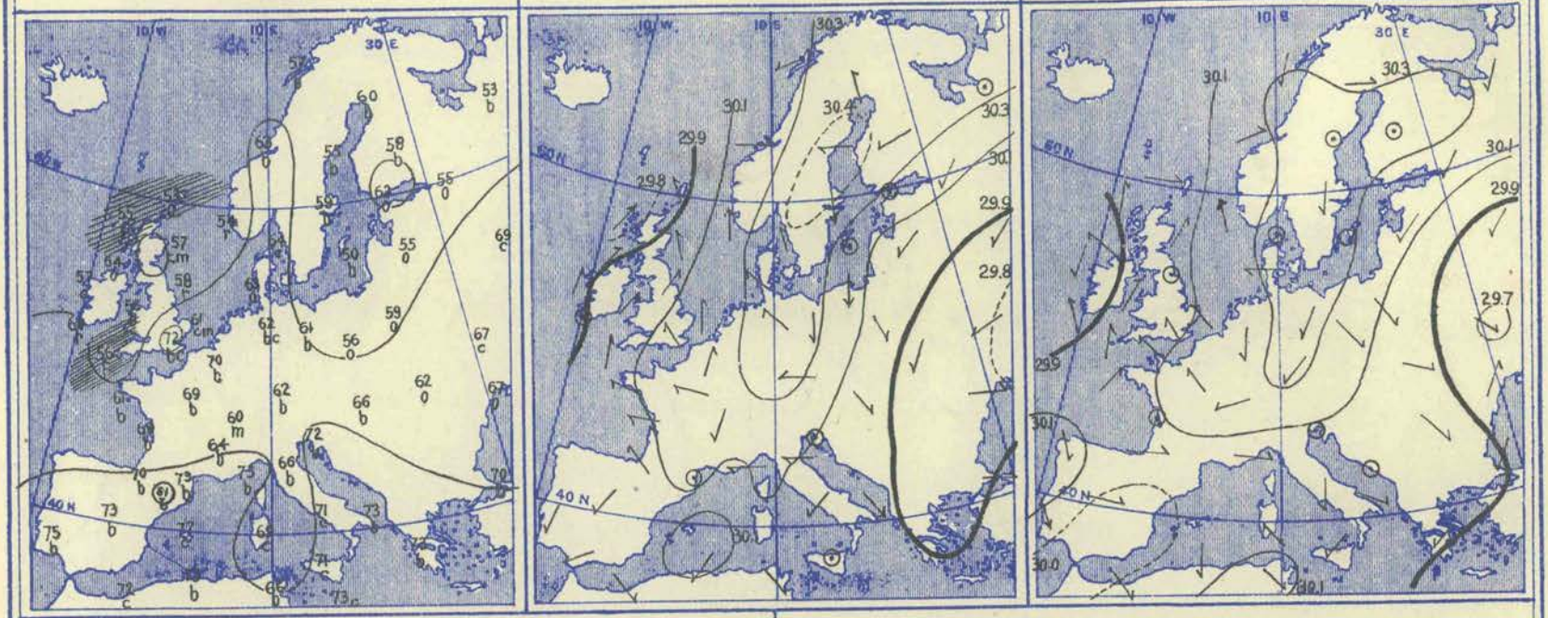
Wind at 8 a.m. showing a light cyclonic movement over the east of Europe, and fresh Southerly (cyclonic) winds prevailing over our own western districts. Light and variable anticyclonic airs in the intervening regions. No general change later, but South-South-Westerly wind increasing to a slight gale on the north-west coast of Ireland.

Barometer at 8 a.m. highest, above 30·4 ins. over the north of Scandinavia, and above 30·1 ins. in an extensive ridge extending thence to Spain. Lowest, below 29·8 ins. (1) in a depression off Ireland, and (2) in another system over the south-west of Russia. Disturbance in west moving north-eastwards during day and barometer falling decidedly on our north-west coasts. High pressure ridge maintaining its position with but little modification either in form or intensity.

Saturday, 27th June, 1903.

Temperature and Weather. — 8 a.m.

Barometer and Wind. — 8 a.m. | 6 p.m.



Weather at 8 a.m. fine over the major portion of the Continent and the south and south-east of England, but dull and rainy in many parts of Ireland, Scotland, and the north of England, and foggy at Scilly. Fine all day in most regions, but rain becoming general in all our more western and northern districts, and heavy amounts falling at Riga and Nicolaïeff.

Temperature risen generally. Morning readings ranging from 81° at Barcelona, 78° at San Fernando, 77° at Palma, and above 70° at many southern stations, and in London, and at the Helder, to below 60° in most parts of our Islands and in many Scandinavian districts, to 53° at Archangel, and to 50° at Wisby. Rising later to 84° in London, and to above 80° in all except the northern countries. Touching 90° at some French stations, and 99° at Madrid. Maxima only about 60° on the coast of Wales.

Wind in morning showing an extensive anticyclonic circulation around Sweden, but light and variable in the far south, Southerly (cyclonic) on our north-west coasts, and Northerly (cyclonic) over the south of Russia. No great or general change during day, but Southerly wind spreading over our Islands.

Barometer fallen somewhat, except over Sweden and central Europe. 8 a.m. readings highest, 30·4 ins. and upwards, in the centre of an anticyclone over Sweden; lowest, 29·8 ins. (1) off our own north-west coasts, and (2) over the south of Russia. Barometer rising on our extreme north-west coasts later but falling somewhat during day in most parts of the Kingdom as well as within the anticyclonic area. Russian depression becoming deeper and its surrounding gradients steeper.

IV.—GENERAL NOTES, etc.

At the beginning of the period barometric pressure was highest in an anticyclone over the Bay of Biscay, France, and our Islands, and relatively high over the east of Russia, while an elongated and complex area of low pressure extended from Finland to Turkey and Greece. This distribution gradually underwent a change as the western anticyclone travelled eastwards and north-eastwards until it finally became established over Scandinavia, whence, by the end of the week, a ridge stretched south-westwards towards the Spanish Peninsula. The low pressure area had in the meantime been transferred to the eastern portion of Europe, but other systems had already appeared off Ireland, without, however, materially affecting the weather excepting over our most western and northern districts. There was little rain over Europe as a whole, and many regions had none, but our own western and northern districts and various parts of Russia had rather frequent falls, while on Monday there were heavy falls over Italy. Temperature continued fairly high as a whole over the southern countries, and towards the end of the week the warmth reached the north of France and the more southern districts of England.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 146.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	38·6	+ 4·4	30	+ 4	SHEFFIELD	40·3	—	34	—	WESTBOURNE	67·0†	+17·0	59†	+ 15
STRATHPEFFER SPA	19·6	−16·8	16	− 14	WORKSOP	42·2	+ 4·8	36	+ 4	VENTNOR HOSPITAL	67·2	+20·9	59	+ 18
EDINBURGH	14·3	−19·6	12	− 16	THURCASTON	47·7	+ 7·4	41	+ 6	BOURNEMOUTH	—	—	—	—
COCKLE PARK	33·5	—	28	—	TUNBRIDGE WELLS	63·3	—	55	—	MARLBOROUGH	49·6	+ 5·9	43	+ 5
NEWCASTLE-ON-TYNE	24·8	—	21	—	MARGATE	59·3	+15·8	52	+ 14	SOUTHPORT	38·4	—	33	—
YORK	35·7	− 6·1	29	− 5	BROADSTAIRS	70·7	—	62	—	RHYL	42·3	—	36	—
CROMER	55·8	—	48	—	RAMSGATE	—	—	—	—	ABERDOVEY	39·2†	—	34†	—
LOWESTOFT	64·6	—	56	—	EASTBOURNE	66·5	+14·9	58	+ 13	TENBY	32·7	−19·8	28	− 17
HOLLESLEY BAY	65·2	—	57	—	BRIGHTON	67·5	+15·1	59	+ 13	TORQUAY	60·5	+ 6·4	53	+ 6
DUNMOW	65·2	—	57	—	WORTHING	70·4	—	62	—	NEWQUAY	—	—	—	—
					BOGNOR	69·5†	—	61†	—	GUERNSEY	73·5†	+14·8	65†	+ 13
					WATERGATE PARK	62·4	—	55	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42 F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending June 13th, 1903.	Swarraton	65	37	60·8	45·7	52·7	− 2·5	75	0	5	2·00	+ 1·55	—	—	—	—
„ „ „ 20th, „	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	21·5	—	19	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 26.] *Third Series.* WEEK ENDING SATURDAY, JULY 4TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 152.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	70	41	60·4	50·5	55·1	1 above	92	+12	0	0	744	− 28	491	− 47
	1. SCOTLAND, EAST	77	48	65·4	52·2	58·3	3 above	114	+19	0	0	881	− 69	502	− 81
	2. ENGLAND, N.E.	79	46	69·1	53·1	60·5	3 above	130	+25	0	0	993	+ 11	342	−137
	3. ENGLAND, EAST	86	47	73·3	53·9	62·9	4 above	146	+27	0	0	1212	+ 16	322	−203
	4. MIDLAND COUNTIES	81	42	71·5	51·6	60·9	3 above	132	+16	0	0	1149	− 78	355	−180
	5. ENGLAND, SOUTH	84	44	70·7	53·8	61·6	2 above	137	+12	0	0	1291	− 29	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	76	45	64·7	51·5	57·6	1 above	109	+ 9	0	0	1004	− 24	317	− 96
	7. ENGLAND, N.W.	80	42	67·1	52·9	59·5	2 above	123	+14	0	0	1105	+ 5	259	−129
	8. ENGLAND, S.W.	80	44	67·6	52·8	59·7	1 above	124	+ 9	0	0	1290	+ 30	162	−138
	9. IRELAND, NORTH	70	49	63·8	52·4	57·7	2 above	110	+ 8	0	0	1035	− 81	286	− 61
	10. IRELAND, SOUTH	77	42	66·4	53·1	59·3	1 above	121	+ 9	0	0	1302	− 3	183	− 67
	— CHANNEL ISLANDS	77	48	66·2	55·4	60·4	1 above	129	+ 4	0	0	1493	+ 53	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 152.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	25	18 more	125	+18	33·9	+12·2	15	−18	12	−15	553	−108	24	− 5
	1. SCOTLAND, EAST	4	6	0 (average)	106	+13	17·8	+ 4·3	53	+15	44	+12	627	− 96	27	− 4
	2. ENGLAND, N.E.	2	1	4 less	87	+ 1	11·1	+ 0·3	66	+21	56	+18	692	− 56	30	− 2
	3. ENGLAND, EAST	0	—	5 less	77	−11	12·0	+ 1·6	81	+33	70	+29	818	− 26	35	− 1
	4. MIDLAND COUNTIES	1	less than half	5 less	86	+ 3	15·0	+ 2·7	69	+30	60	+26	688	− 37	30	− 2
	5. ENGLAND, SOUTH	0	—	5 less	89	+ 7	15·2	+ 3·2	82	+34	73	+30	847	− 1	37	0
Principal Grazing Districts.	6. SCOTLAND, WEST	5	12	4 more	116	+20	30·3	+ 8·6	42	+ 1	35	+ 1	684	− 79	29	− 3
	7. ENGLAND, N.W.	2	1	5 less	105	+15	17·6	+ 3·5	60	+23	51	+19	769	+ 20	33	+ 1
	8. ENGLAND, S.W.	1	1	5 less	101	+ 9	21·0	+ 4·2	69	+18	61	+16	799*	− 93	35	− 4
	9. IRELAND, NORTH	5	8	1 more	124	+15	20·5	+ 5·0	38	+ 3	32	+ 3	616	−108	26	− 5
	10. IRELAND, SOUTH	3	3	3 less	113	+14	23·1	+ 4·9	45	+ 6	38	+ 5	700	−111	30	− 5
	— CHANNEL ISLANDS	2	1	4 less	109	+14	14·7	+ 0·9	76	+20	68	+18	949	− 63	41	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was fine and bright over the country as a whole, but rain was of almost daily occurrence in the extreme north and north-west. Thunderstorms were experienced at many western and northern stations on Thursday.

Temperature was above the mean very generally, the excess ranging from 1° or 2° in most localities to 4° in England E. The highest of the maxima, which were recorded on rather irregular dates, but in most cases on Sunday or Thursday, were as high as 86° in England E., 84° in England S., and 80° or 81° in several other English localities. In Scotland N. and Ireland N. the thermometer recorded no higher reading than 70°. The lowest of the minima occurred either about the middle or at the end of the week, and ranged between 41° in Scotland N. and 42° in the Midland Counties, England N.W. and Ireland S., to 48° in the Channel Islands and Scotland E., and to 49° in Ireland N.

Rainfall was very heavy in Scotland N. and W.—more than three times as great in the former district—and slightly exceeded the mean in Ireland N. In all other districts except in Scotland E. (where the mean was just equalled) there was a deficit, and many stations in the south and east of England were quite rainless.

Bright Sunshine was much in excess of the mean over England, but only slightly so in Ireland and in Scotland W. In Scotland N. there was less than half the average. The percentage of the possible duration ranged from 73 in England S., 70 in England E., and 68 in the Channel Islands, to 32° in Ireland N., and to no more than 12 in Scotland N.

Barometer and Wind. During the whole of this period, cyclonic disturbances—some of them rather deep—passed in a general north-easterly direction outside or over our north-western and northern coasts, while two anticyclones moved in succession eastwards over France and our southern districts, and occasionally extended their influence further to the northward. The Southerly to Westerly winds which consequently prevailed, often blew freshly in the west and north, and on Friday they reached the force of a fresh gale on our extreme north and north-west coasts.

173 | 70 Wy. & S. Ltd
290 | 90 12 | 02

II.—DATA from which the SUMMARY on page 151 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.	*	*	*	*
0. SCOTLAND, N.	Sumburgh Head	59	41	55·9	47·9	51·6	+ 0·5	67	0	6	1·74	+ 1·25	*	*	*	*
	Stornoway	65	46	60·0	49·6	54·4	+ 1·1	87	0	7	2·23	+ 1·61	16·2	- 20·5	13	- 16
	Wick	70	48	62·9	51·4	56·8	+ 3·3	104	0	6	1·09	+ 0·61	*	*	*	*
	Lairg $	67	48	62·8	50·9	56·4	+ 2·9	101	0	6	1·60	+ 1·00	*	*	*	*
	Glencarron $	69	45	59·3	49·8	54·2	+ 0·1	85	0	7	4·94	+ 3·68	*	*	*	*
	Fort Augustus $	70	50	61·6	51·2	56·0	+ 0·5	98	0	7	1·87	+ 1·27	11·5	- 13·9	9	- 11
	Fort William	66	51	60·2	52·7	56·2	+ 0·7	99	0	7	4·19	+ 3·14	6·3	- 28·3	5	- 23
1. SCOTLAND, E.	Nairn	69	49	64·7	51·7	57·8	+ 2·2	111	0	6	0·78	+ 0·26	*	*	*	*
	Aberdeen	74	49	67·1	52·4	59·2	+ 3·9	120	0	5	0·68	+ 0·15	54·2	+ 13·7	44	+ 11
	Braemar $	69	48	60·4	50·5	55·1	+ 1·8	92	0	6	1·17	+ 0·57	*	*	*	*
	Ochtertyre $	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Leith $	77	50	69·3	54·1	61·2	+ 4·1	134	0	3	0·12	- 0·41	*	*	*	*
	Marchmont $	—	—	—	—	—	—	—	—	2	0·32	- 0·38	60·0	+ 26·0	50	+ 17
2. ENGLAND, N.E.	Alnwick Castle	73	49	68·7	52·6	60·1	+ 4·6	127	0	2	0·06	- 0·50	*	*	*	*
	Durham	70	46	66·1	52·1	58·6	+ 1·4	116	0	3	0·22	- 0·33	56·6	+ 18·3	48	+ 16
	Shields	74	51	67·7	54·3	60·5	+ 4·4	130	0	2	0·13	- 0·37	*	*	*	*
	Scarborough Ⓜ	74	47	68·3	51·7	59·4	+ 2·0	122	0	2	0·03	- 0·51	66·0	—	56	—
	Spurn Head	76	53	69·7	56·0	62·4	+ 4·4	143	0	1	0·03	- 0·33	*	*	*	*
	Fulbeck (Lincolnshire)	79	49	74·3	51·7	62·2	+ 3·3	141	0	0	0·00	- 0·48	75·6	—	65	—
3. ENGLAND, E.	Hillington Ⓜ	83	47	74·9	52·2	62·8	+ 3·8	146	0	0	0·00	- 0·56	82·9	+ 37·9	72	+ 33
	Yarmouth	75	50	70·9	55·6	62·7	+ 4·3	145	0	0	0·00	- 0·52	*	*	*	*
	Geldeston	86	48	74·8	53·5	63·4	+ 4·7	150	0	0	0·00	- 0·50	79·7	+ 31·4	69	+ 27
	Cambridge	83	50	75·6	53·0	63·5	+ 3·4	151	0	0	0·00	- 0·51	72·9	+ 27·0	63	+ 23
	Felixstowe	75	50	70·7	54·8	62·2	+ 3·5	141	0	0	0·00	—	93·1†	—	81†	—
	Rothamsted	79	48	72·3	51·6	61·2	+ 2·4	134	0	0	0·00	- 0·53	83·5	+ 37·1	73	+ 33
	Shoeburyness	84	53	73·9	56·4	64·5	+ 5·0	158	0	0	0·00	- 0·38	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	75	46	67·5	51·5	58·9	+ 2·4	118	0	3	0·10	- 0·52	70·6	—	60	—
	Bawtry (Hesley Hall)	80	45	73·0	53·0	62·3	+ 3·6	142	0	2	0·02	- 0·53	*	*	*	*
	Loughborough	80	47	74·0	52·9	62·7	+ 2·8	145	0	0	0·00	- 0·50	*	*	*	*
	Colly Weston (Stamford)	81	47	74·3	52·1	62·4	+ 2·8	143	0	0	0·00	- 0·50	*	*	*	*
	Cheadle Ⓜ	77	46	69·2	51·8	59·9	+ 3·2	125	0	1	0·09	- 0·58	*	*	*	*
	Birmingham (Edgbaston)	78	49	70·7	52·7	61·1	+ 2·9	134	0	1	0·02	- 0·58	55·1	—	48	—
	Churchstoke Ⓜ	76	47	70·1	50·0	59·4	+ 2·6	122	0	2	0·08	- 0·44	66·9	+ 23·4	58	+ 20
	Hereford Ⓜ	77	45	72·5	50·5	60·7	+ 1·5	131	0	1	0·03	- 0·45	*	*	*	*
	Cirencester	79	42	71·1	48·0	58·8	+ 0·7	118	0	0	0·00	- 0·57	79·4	+ 34·2	70	+ 30
	Oxford	80	49	72·9	53·1	62·3	+ 2·5	142	0	0	0·00	- 0·53	79·0	+ 33·6	69	+ 30
5. ENGLAND, S	London	84	50	76·7	54·7	64·9	+ 3·8	160	0	0	0·00	- 0·47	80·7‡	+ 38·7‡	71‡	+ 34‡
	Swarraton (Alresford) Ⓜ	78	44	71·8	49·8	60·0	+ 2·3	126	0	0	0·00	- 0·53	*	*	*	*
	Dungeness	73	52	68·0	55·6	61·4	+ 2·0	136	0	0	0·00	- 0·33	80·8	—	72	—
	Hastings (St. Leonards)	77	50	69·5	54·8	61·6	+ 2·3	137	0	0	0·00	- 0·44	88·9	+ 36·1	79	+ 32
	Southampton	80	51	74·7	54·2	63·7	+ 2·7	152	0	0	0·00	- 0·50	80·5	+ 30·8	71	+ 27
	Portland Bill	66	53	64·1	54·6	59·0	+ 0·6	119	0	0	0·00	—	*	*	*	*
	Shaftesbury Ⓜ	74	50	69·9	53·0	60·9	+ 3·1	132	0	1	0·01	- 0·57	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	70	49	63·3	52·3	57·4	+ 1·0	108	0	7	3·94	+ 2·88	*	*	*	*
	Glasgow	71	51	64·5	53·5	58·6	+ 2·1	116	0	5	0·83	+ 0·13	28·6	- 5·8	24	- 5
	Cally $	73	45	67·3	49·0	57·5	+ 1·4	109	0	5	0·78	- 0·02	*	*	*	*
	Aspatria	76	48	65·0	51·9	58·0	+ 1·6	112	0	3	0·40	—	43·4	—	37	—
	Douglas (Isle of Man)	68	47	63·4	50·9	56·7	+ 0·5	103	0	3	0·22	- 0·39	54·3	+ 7·0	46	+ 6
7. ENGLAND, N.W	Newton Rigg	80	42	66·6	49·4	57·4	+ 1·4	108	0	1	0·09	—	41·8	—	35	—
	Stonyhurst	75	47	65·3	52·7	58·6	+ 1·2	116	0	3	0·12	- 0·73	58·4	+ 16·2	50	+ 14
	Blackpool Ⓜ	77	46	66·2	54·0	59·7	+ 1·5	124	0	2	0·18	- 0·40	61·6	+ 18·8	53	+ 16
	Manchester (Prestwich)	78	47	68·5	52·1	59·7	+ 2·2	124	0	3	0·13	- 0·62	55·1	—	47	—
	Liverpool Obsy. (Bidston)	78	52	66·9	54·3	60·2	+ 1·5	127	0	1	0·05	- 0·50	66·7	—	57	—
	Chester (Hawarden Bridge)	79	47	70·4	54·9	62·1	+ 3·3	141	0	1	0·05	—	*	*	*	*
	Llandudno Ⓜ	80	49	68·6	53·5	60·5	+ 1·8	130	0	2	0·06	- 0·45	75·9	+ 32·6	65	+ 28
	Holyhead	75	48	64·4	52·3	57·9	+ 0·4	111	0	3	0·13	- 0·39	*	*	*	*
8. ENGLAND S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	65	52	60·0	53·6	56·6	- 0·6	102	0	2	0·12	- 0·38	57·1	+ 7·1	50	+ 6
	Clifton	80	53	70·4	55·3	62·3	+ 2·9	142	0	1	0·04	- 0·54	*	*	*	*
	Bath	79	48	70·9	53·7	61·7	+ 1·7	138	0	0	0·00	- 0·54	79·7	—	70	—
	Arlington (N. Devon)	73	49	66·7	51·9	58·8	+ 1·7	118	0	1	0·10	- 0·74	*	*	*	*
	Cullompton Ⓜ	76	44	71·2	49·7	59·7	+ 0·2	124	0	1	0·02	- 0·55	61·4	+ 17·0	54	+ 15
	Falmouth	67	50	65·8	52·8	58·9	+ 0·1	118	0	1	0·16	- 0·46	69·0	+ 16·4	61	+ 15
	Plymouth	74	49	68·1	52·5	59·8	0·0	125	0	1	0·09	- 0·45	75·9	+ 27·3	67	+ 24
9. IRELAND, N.	Malin Head	64	51	60·1	52·3	55·9	0·0	97	0	6	0·66	+ 0·07	*	*	*	*
	Edenfel (Omagh)	68	49	63·7	52·1	57·5	+ 1·7	109	0	5	0·37	+ 0·16	*	*	*	*
	Blacksod Point	64	52	61·3	54·3	57·6	+ 0·9	109	0	6	1·01	+ 0·37	*	*	*	*
	Markree Castle	69	50	65·4	51·9	58·2	+ 2·3	113	0	5	1·28	+ 0·51	33·4	0·0	28	0
	Armagh	70	50	66·0	52·7	58·9	+ 2·2	118	0	4	0·24	- 0·39	41·5	+ 6·0	35	+ 5
	Donaghadee	69	49	66·3	51·3	58·3	+ 1·9	114	0	5	0·54	- 0·03	*	*	*	*
10. IRELAND, S.	Dublin	74	52	68·9	54·8	61·4	+ 2·5	136	0	3	0·09	- 0·42	53·9	+ 12·7	47	+ 11
	Birr Castle	74	48	67·9	51·9	59·3	+ 1·9	121	0	4	0·18	- 0·44	41·8	+ 6·8	36	+ 6
	Kilkenny	72	46	66·7	50·9	58·3	+ 0·4	114	0	1	0·10	- 0·46	*	*	*	*
	Waterford	68	45	64·4	53·0	58·3	0·0	114	0	1	0·16	- 0·50	*	*	*	*
	Roche's Point	64	48	62·9	53·6	57·9	- 0·6	111	0	4	0·22	- 0·45	*	*	*	*
	Valencia	66	48	62·7	55·1	58·6	+ 0·9	116	0	5	0·96	+ 0·13	37·9	- 1·8	33	- 2
	Killarney	77	42	69·8	53·1	60·9	+ 3·5	132	0	5	0·53	- 0·20	*	*	*	*
	Foynes	75	51	67·7	52·4	59·5	+ 2·4	123	0	2	0·37	- 0·27	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	67	54	64·7	55·6	59·8	+ 0·8	125	0	3	0·16	- 0·31	71·6	+ 18·7	64	+ 17
	Jersey	77	48	67·7	55·1	61·0	+ 0·4	133	0	1	0·01	- 0·46	77·9	+ 21·9	70	+ 20

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked $ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

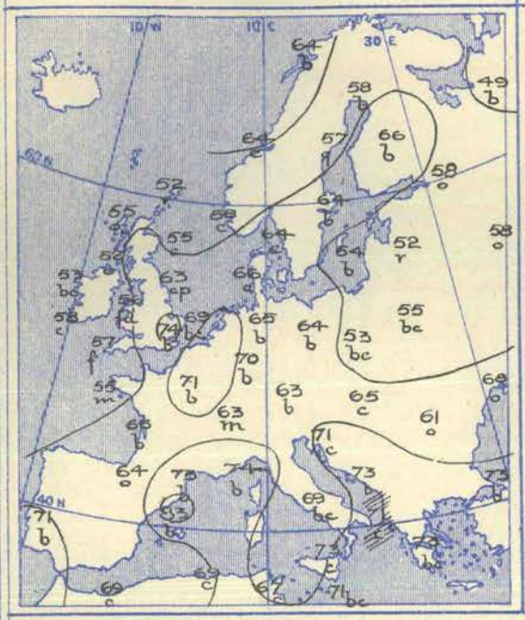
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 28th June, 1903.

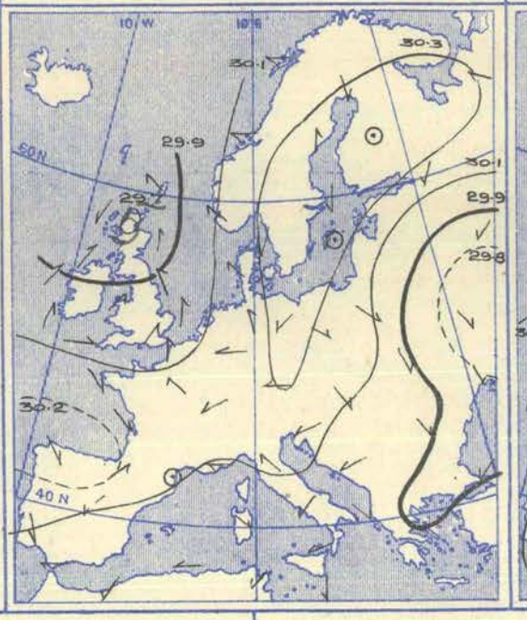
Temperature and Weather. 8 a.m.



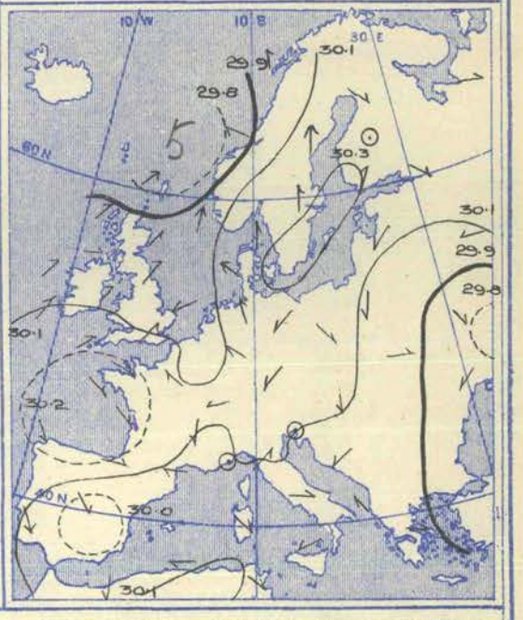
Weather in morning fine and bright generally, but cloudy or dull at some of our western and northern stations, in the west of Norway, and the west of Russia. Rainy on the Welsh coast, in the north of Scotland, and also at Skudesnaes and Riga, and foggy at Palermo, Cape Sicié, and Corunna. Slight rain at most of our own western and northern stations later, and in some Scandinavian localities, and more considerable falls over Russia and in parts of Poland. Thunder occurring in the west of France.

Temperature risen generally. Morning readings highest, 83° at Barcelona, 78° at San Fernando, and above 70° at many Mediterranean and Adriatic stations, 74° in London, Le Mans, and Brussels, 64° at Bodö and Christiansund. Lowest, 49° at Archangel, 52° at Riga and Sumburgh Head, and 54° at Malin Head. Touching 100° at Madrid during the day, and exceeding 90° at several other southern stations. Maxima between 75° and 85° very common over central Europe, and thermometer rising to 84° in London.

Barometer and Wind. 8 a.m.



6 p.m.

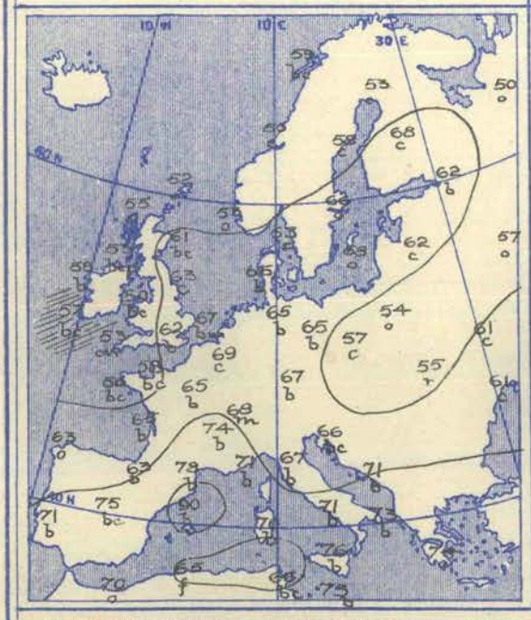


Wind light and anticyclonic over Europe as a whole, but light to fresh cyclonic breezes prevailing over the United Kingdom, and also over the southern half of Russia. No general change later, but a cyclonic movement setting in over Spain and Portugal.

Barometer changed but little, and rather irregularly. Ranging in morning from 30·3 ins. and upwards in an elongated anticyclone stretching from the White Sea to Munich, to below 29·8 ins. (1) in a depression over Scotland, and (2) in another system over the more southern parts of Russia. Latter system moving south-eastward later in day, and that over Scotland travelling in a north-easterly direction. Anticyclone decreasing somewhat in intensity. A shallow depression forming over central Spain by evening.

Monday, 29th June, 1903.

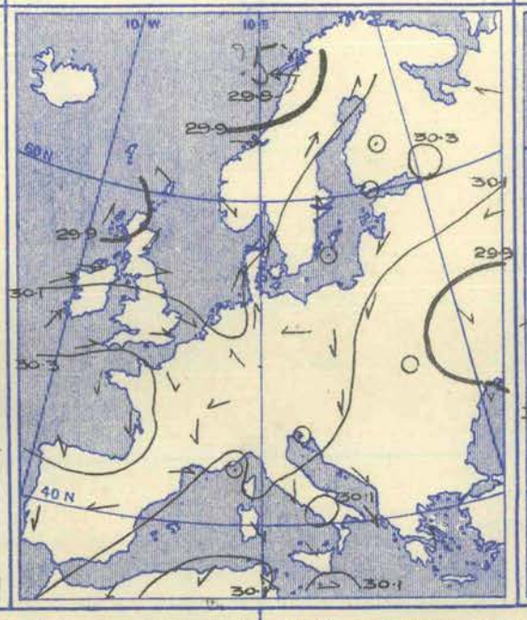
Temperature and Weather. 8 a.m.



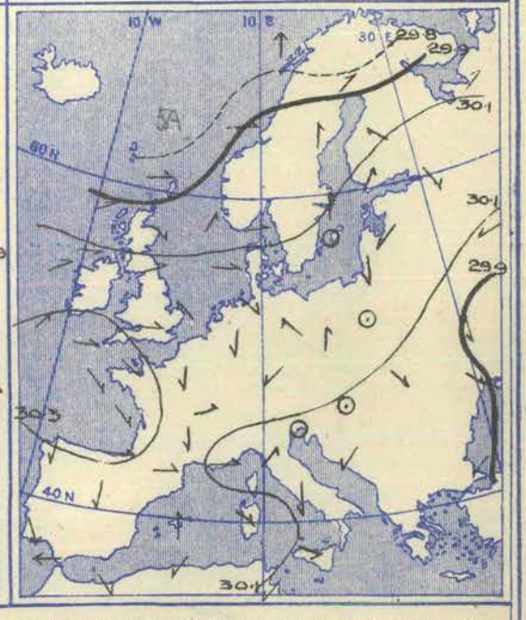
Weather in morning cloudy or dull over Scandinavia, and at several of our own northern and north-western stations, but fine over our area as a whole. Rain falling at Wick, showers in the north of Ireland, and fog prevailing at Algiers and Cape Sicié. Remaining fine and dry generally, but rain again falling over our western and northern districts, in some parts of Scandinavia and Russia, and also at Constantinople—more than an inch at the last-named station and at Kharkov. Thunderstorms experienced at a few French stations.

Temperature fallen over England and France, changed irregularly elsewhere. Readings at 8 a.m. ranging from 90° at Barcelona, 76° at Palermo, 75° at Leghorn and Madrid, 74° at Athens and Lyons, 72° at Frankfürt, and 68° at Kuopio, to a little above 50° in the extreme north of Ireland and Scotland, and 50° at Archangel. Rising subsequently to 73° or 74° in the south of Sweden and the south-east of England, to a little below 80° or several degrees above it over all the central and southern districts of Europe generally, to 93° at Frankfürt, to 97° at Cette, and to 100° at Madrid.

Barometer and Wind. 8 a.m.



6 p.m.

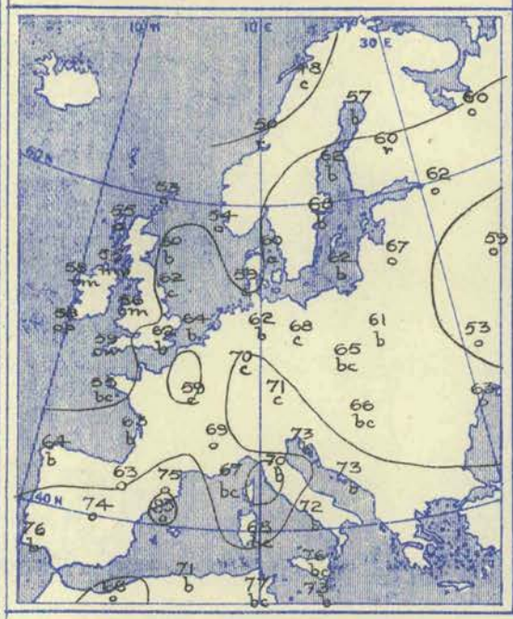


Wind in morning still cyclonic over the north-west and south-east of our area, the Westerly current on our north-west coasts and at Skudesnaes blowing strongly. Light and anticyclonic elsewhere. A cyclonic circulation setting in over Spain during day, but no very important change elsewhere.

Barometer fallen over the centre and north of Europe, risen elsewhere. Morning readings ranging from above 30·3 ins. in an anticyclone over the Bay of Biscay and its neighbourhood, and above 30·2 ins. in an elongated system extending from Munich to the White Sea, to below 29·9 ins. in a depression over and off the north-west of Scotland, and to less than 29·8 ins. in the extreme south of Russia. Both high and low pressure systems moving eastwards or north-eastwards later, and another cyclonic disturbance forming over Spain.

Tuesday, 30th June, 1903.

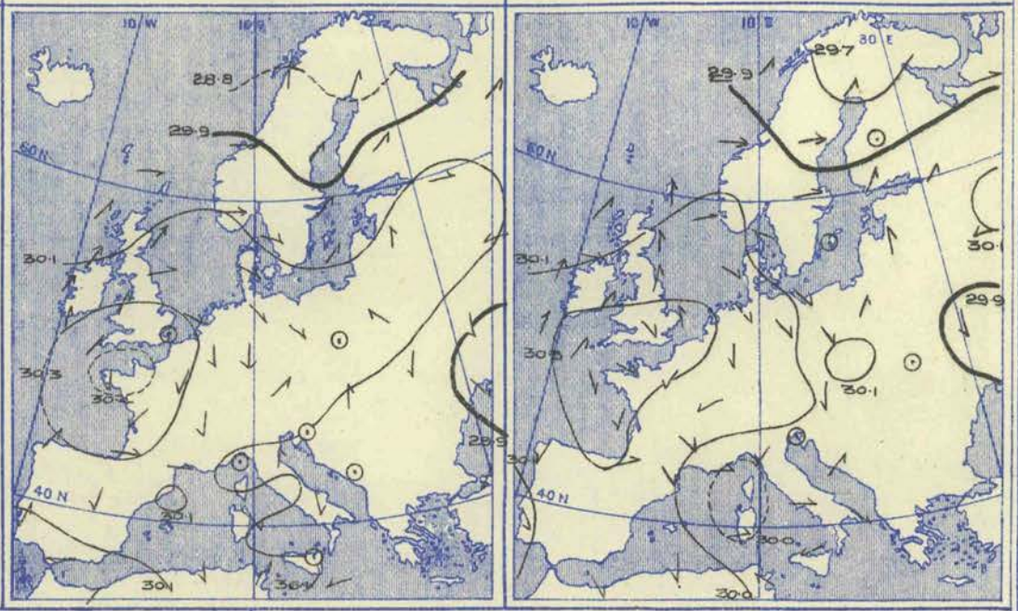
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine and bright over Italy, Sweden, and the south-east of England, but cloudy or dull over our area as a whole. Rainy in the west and north of Ireland, as well as at Kuopio and Lemberg, and foggy at Cape Sicié. Rain again experienced over the north and west of our Islands, and heavy falls in the north of Italy, at Breslau, and Kharkov. Thunderstorms occurring in the south and west of France.

Temperature changed irregularly. Morning readings highest, 83° at Barcelona, 76° at Lisbon and Leghorn, 73° at Trieste, and 70° at Frankfürt. Lowest, 48° at Bodö, 50° at Christiansund, 53° at Sumburgh Head, and below 60° at nearly all Irish, Scotch, and Welsh stations. Rising later to 75° at Stockholm, St. Petersburg, and in London, to nearly 80° in Germany and Austria-Hungary, and to above that figure in several parts of France and Italy. Highest value of all, 94° at Sanguinaires and Tunis. Maxima below 60° on our extreme north-west coasts and in Norway.

Barometer and Wind. 8 a.m. 6 p.m.

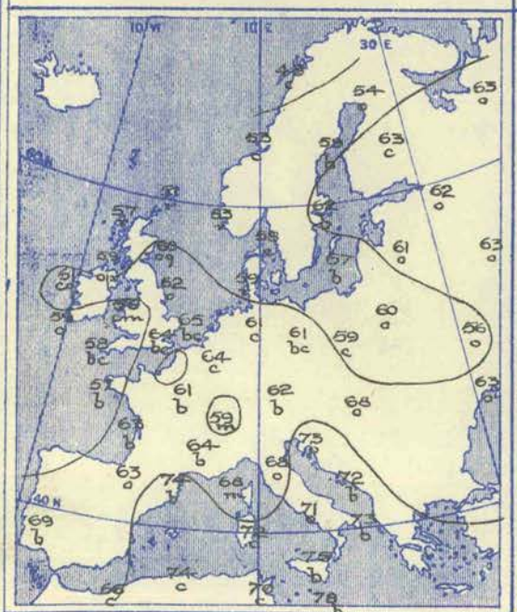


Wind light and anticyclonic over the major portion both of the United Kingdom and the Continent, but fresh or strong South-Westerly cyclonic winds prevailing on our north-west coasts, and a partial cyclonic circulation over the south of Russia and north of Scandinavia. Very little change later in day.

Barometer in morning highest, 30·4 ins. and upwards in the central portion of an anticyclone lying over Brittany and the western part of the Channel, and above 30·1 ins. in a ridge extending thence east-north-eastwards to central Russia. Lowest, 29·8 ins. and less in a depression over Lapland, and in another over the south of Russia. A shallow disturbance appearing later over Corsica and Sardinia, but no general change in the distribution of pressure.

Wednesday, 1st July, 1903.

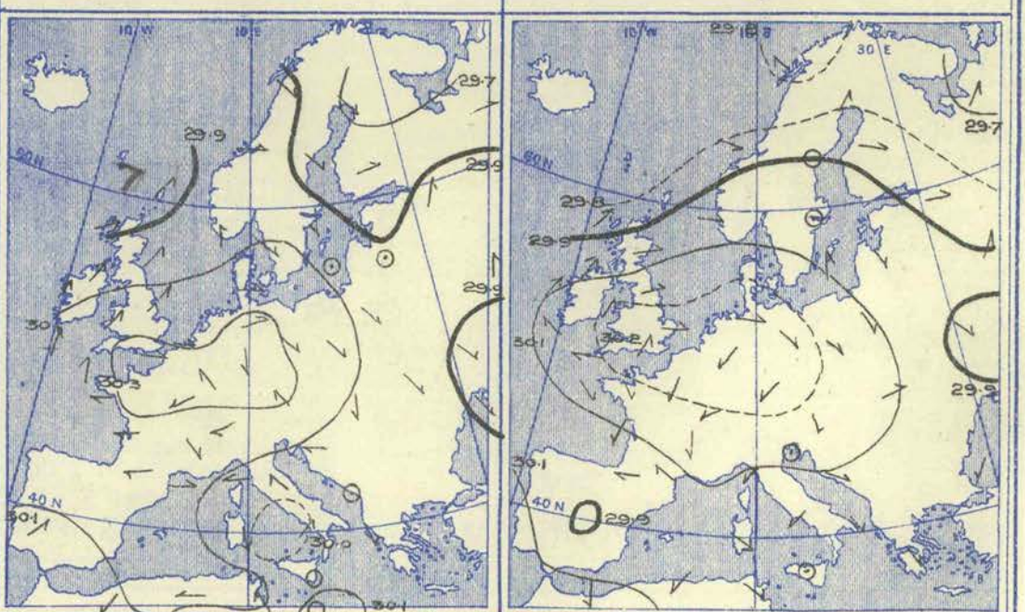
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine as a whole, but cloudy or dull in many parts of eastern and central Europe, and in Ireland and Scotland. Showers falling at Malin Head, and rain in the Shetlands and Hebrides, and also at Vienna. Weather dry as a whole during day, but a little rain falling in Italy, Austria, and Scandinavia, and thunder and lightning occurring at Lorient.

Temperature fallen over Italy, Germany, and Sweden, risen or changed irregularly elsewhere. Readings at 8 a.m. highest, 78° at Malta, 77° at Aumale, 74° at Perpignan, 73° at Trieste, and 68° at Buda-Pesth. Lowest, 48° at Bodö, 51° in the Shetlands, 56° on the coast of Wales, and 59° on the south coast of Ireland. Maxima during day 70° at Hernösand, 78° in London, between 80° and 90° in most parts of southern Europe, and as high as 104° at Madrid.

Barometer and Wind. 8 a.m. 6 p.m.

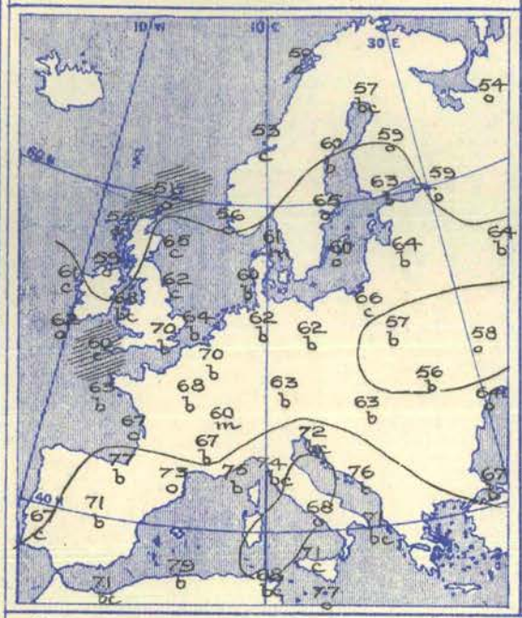


Wind light and anticyclonic over England, and all the adjacent countries on the Continent, but a complete cyclonic circulation shown over the central parts of the Mediterranean, and partial cyclonic movements over Ireland and Scotland, over Finland and Sweden, and the south of Russia. South-Westerly current strong to a moderate gale on the north-west coast of Ireland. Another cyclonic circulation setting in over the Spanish Peninsula during day, but no other important change.

Barometer fallen as a whole, but risen over Germany, Denmark, Norway, and the Netherlands. Morning readings ranging from upwards of 30·3 ins. in an anticyclone lying over the southern half of England, the north of France, the Netherlands and western Germany, to below 30·0 ins. in a shallow depression with its centre between Sardinia and Italy, to 29·9 ins. and less in two other systems—one with its centre off the north of Scotland, and the other with its minimum over the Sea of Azov, and to below 29·7 ins. in a disturbance over Lapland. Anticyclone decreasing somewhat in intensity later, and a depression forming near Madrid.

Thursday, 2nd July, 1903.

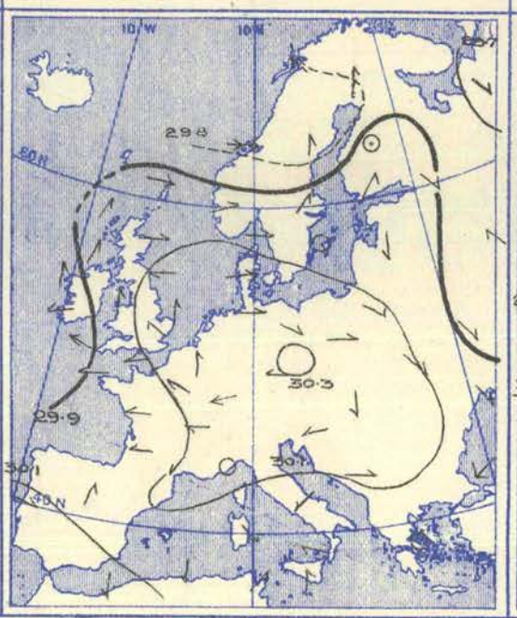
Temperature and Weather. 8 a.m.



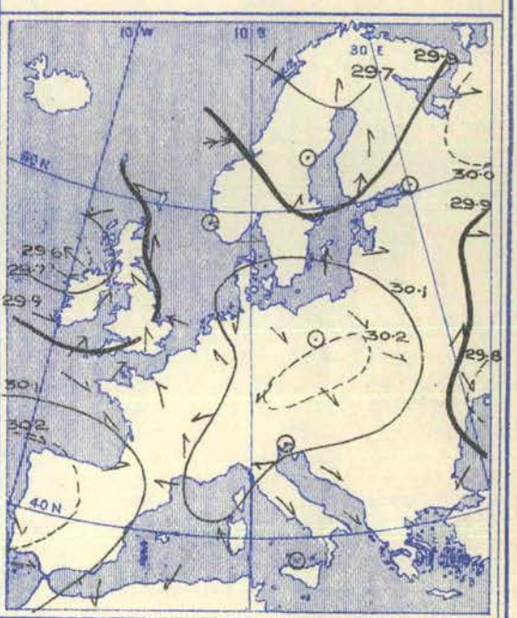
Weather at 8 a.m. fine and bright as a whole, but cloudy or dull along the Atlantic seaboard of our Islands and the Continent, with thunder at Lorient. Rain falling later in all our northern and western districts, and in several parts of Scandinavia and northern Russia; thunderstorms experienced at a few places in the south-west of France, and at many English, Scotch, and Irish stations.

Temperature risen generally, and ranging at 8 a.m. from 79° at Algiers and Barcelona, and from 70° or above in most southern localities and in London, to below 60° on our extreme north-west and north coasts, and at most stations in the far north of the Continent; lowest reading of all 50° at Bodö. Rising subsequently to 80° over central England, 84° in London, to between 80° and 90° in nearly all parts of France, southern and central Europe, and to above 70° in Sweden. Highest readings of all 91° at Toulouse and 95° at Aumale.

Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.

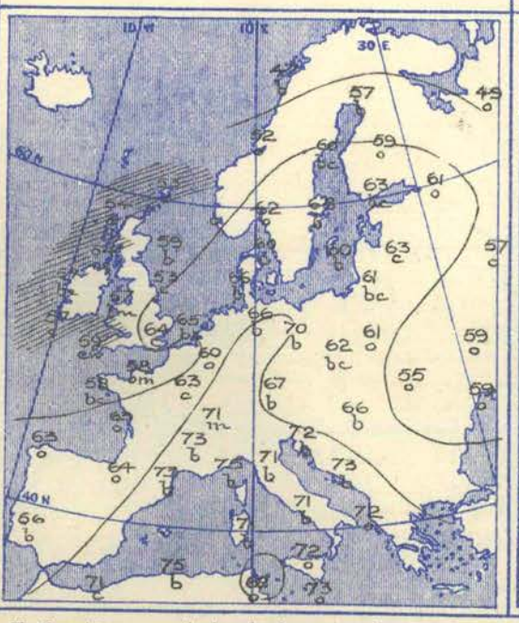


Wind at 8 a.m. showing a light anticyclonic circulation around central Europe, and a brisk cyclonic movement over Scandinavia. Westerly wind at Christiansund blowing a fresh gale. Easterly and South-Easterly-cyclonic-winds also prevailing on our west and south-west coasts. Cyclonic winds becoming general over the United Kingdom during day, and South-Easterly current blowing a moderate gale in the north of Ireland. Westerly gale continuing at Christainsund.

Barometer falling decidedly over the United Kingdom and France. Morning readings ranging from 30·3 ins. to 30·1 ins. in an anticyclone covering nearly all the more central parts of Europe, to less than 29·9 ins. in a depression approaching from the Atlantic, to below 29·8 ins. in another system over the north of Scandinavia, and to below 29·7 ins. in the neighbourhood of Archangel. Pressure decreasing briskly over our Islands later, and the centre of a rather important depression advancing to a position near Malin Head. Continental anticyclone giving way slowly.

Friday, 3rd July, 1903.

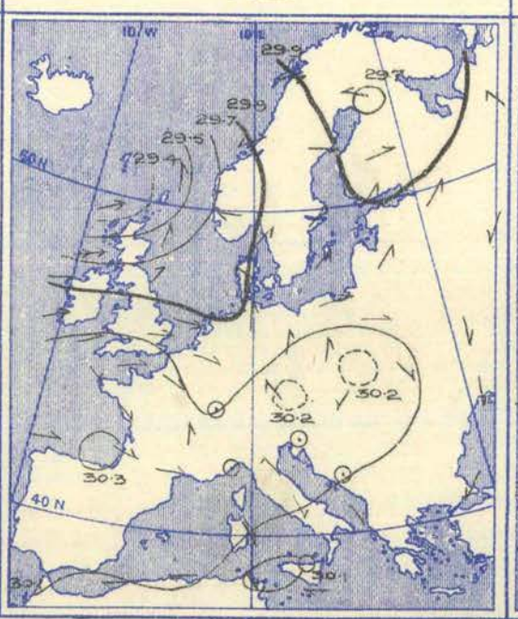
Temperature and Weather. 8 a.m.



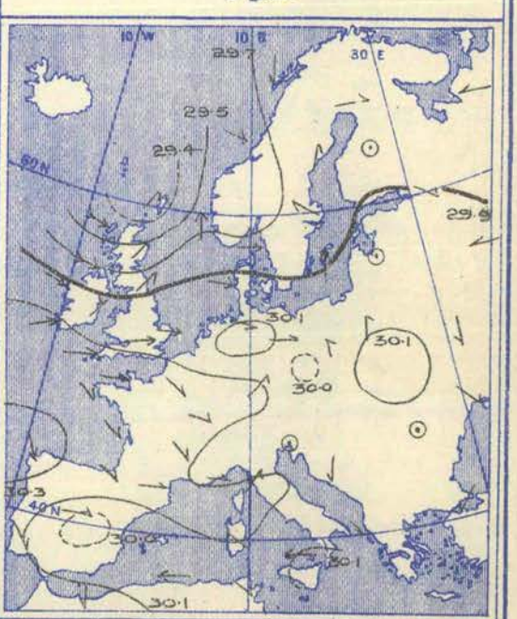
Weather at 8 a.m. continuing fine in most regions, but unsettled and rainy on our extreme north-west coasts, and cloudy or dull over the greater part of Russia, with rain at Nicolaieff. Fog prevailing at San Fernando. Rain falling later at several of our own extreme western and northern stations, and in various parts of Scandinavia; heavy rain experienced during a thunderstorm at Clermont, more than 2 inches at Frankfurt and Munich.

Temperature fallen in most places, but risen over the central countries and Italy. Morning readings highest, 78° at Leghorn, 77° at Aumale, 75° in the south-east of France, 73° or 72° on the shores of the Adriatic, and 72° at Frankfurt, Lowest, 47° at Bodö, 49° at Archangel, 52° at Christiansund, and 53° or 54° in the Shetlands and Hebrides. Rising during day to 72° at Haparanda, St. Petersburg, and Yarmouth to over 80° over central and southern Europe and in Algeria. Highest readings of all, 91° at Frankfurt, and 92° at Madrid.

Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.

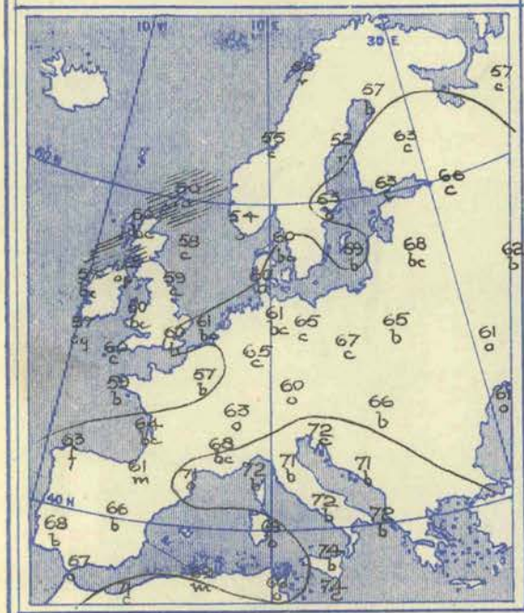


Wind in morning fresh or strong from the Westward over the United Kingdom (a gale at Malin Head), moderate from South over the North of Germany, from South-East in Denmark and the south-west of Norway, and from the Eastward at Christiansund. A smaller, but complete cyclonic circulation shown in the extreme north of Europe, but light cyclonic airs prevailing in all the more central and southern regions. Not much change as a whole later, but wind veering to West-North-West on our north-west coasts, and increasing to a fresh gale at Stornoway.

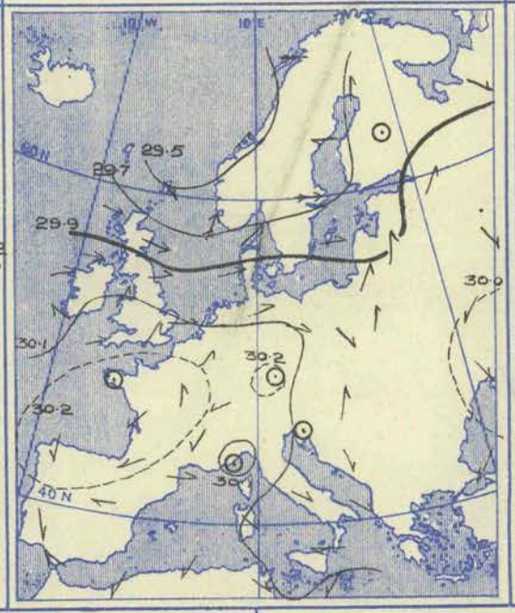
Barometer at 8 a.m. ranging from above 30·2 ins. to 30·1 ins. in a large area extending from the Bay of Biscay to Poland to below 29·7 ins. in a small minimum near Haparanda, and to about 29·3 ins. in a large and rather deep depression with its centre off the north of Scotland. Scotch disturbance moving eastwards later, and barometer falling briskly over Scandinavia. Another minimum forming over Spain. Readings becoming less regular within the anticyclonic region.

Saturday, 4th July, 1903.

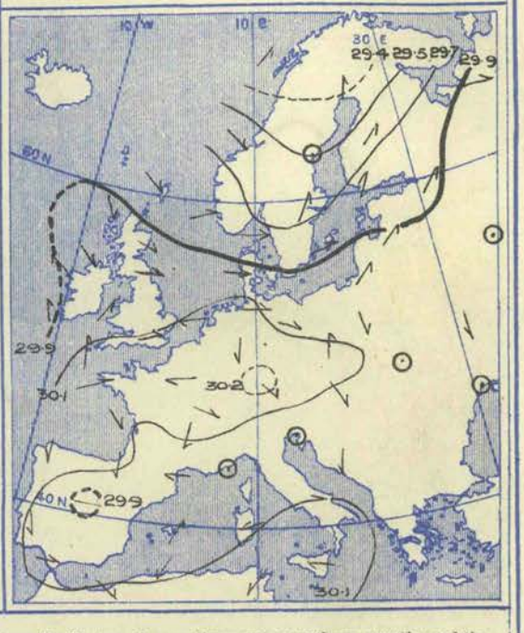
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fair or fine over Europe as a whole, but rainy in some parts of Scandinavia, and cloudy or dull at some of our extreme western and northern stations, with showers at Malin Head. Fog prevailing on the north-west coast of the Iberian Peninsula. Rain later at almost all our own northern and western stations—0·51 in. at Valencia—and also over Norway, Sweden, southern Russia and Poland.

Temperature fallen except in Russia. Morning readings highest, 77° at Aumale, 74° at Malta and Palermo, 73° at Cape Sicié, 68° at Riga, 64° at Uleaborg, and 62° at Moscow. Lowest, 50° at Bodö, Sumburgh Head, and Stornoway, 52° at Malin Head, 55° at Lorient, 57° at Paris, and 58° at Brussels. Rising during day to 71° in London, 73° at Hernösand, 86° at St. Petersburg, and above 80° in most southern districts. Highest readings of all, 93° at Cagliari, 95° at Madrid, and 99° at Aumale.

Wind at 8 a.m. fresh or strong from the Westward over all our more northern counties and the North Sea, and strong to a gale from West or South-West in Denmark and the major portion of Scandinavia, but Southerly at Haparanda and Easterly at Bodö. Light anticyclonic airs prevailing over nearly all the central and southern regions, but a feeble cyclonic movement shown over Spain and Portugal. Veering and decreasing in force over northern Europe by evening, and backing to the Southward or South-Eastward along our own west coasts. Little change elsewhere.

Barometer risen in our Islands and France, fallen in most other regions—most in Norway. Readings in morning highest, 30·2 ins. and upwards, over the Bay of Biscay and France. Lowest, less than 29·5 ins. in a depression off the west of Norway; less than 30·1 ins. in another system over central Spain. Anticylone giving way later, northern depression travelling to Lapland, that over Spain becoming deeper, and a new disturbance—which afterwards proved to be very important—advancing towards Ireland.

IV.—GENERAL NOTES, etc.

The weather during this period was generally fine and dry over all the more central and southern countries as well as over the south-eastern half of England. There were, however, a few exceptions, as heavy rain was experienced in the north of Italy on Tuesday, and still heavier falls over Germany and at Clermont on Friday. Over the northern and north-western regions of Europe, including our own most western and northern districts, a good deal of cloud was reported, and rain—not as a rule in large quantity—fell almost daily. Thunderstorms, too, were very common in the northern and western parts of the United Kingdom on Thursday. The distribution of pressure was almost continuously anticyclonic in an area extending from the Bay of Biscay over central Europe, and at first also in an elongated system stretching from Germany to Finland and north Russia, while cyclonic disturbances travelled north-eastwards over or near our north-western and northern districts to the northern part of the Continent. Depressions of little depth were also shown over the south of Russia and the Black Sea. The Southerly to Westerly winds accompanying the disturbances in the north-west and north were generally fresh or strong on our north-west and north coasts, and at times in Scandinavia and Denmark, and in a few localities gales were reached. Temperature did not differ materially from the average for the time of year as a whole, but was occasionally several degrees above it over France, Germany, and the south-east of England.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from Observations made at 8 a.m. in the British Islands, Belgium, Holland and Spain; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands, Belgium and Spain; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 152.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	24·0	- 9·7	19	- 8	SHEFFIELD	64·1	—	55	—	WESTBOURNE	87·4†	+36·9	77†	+ 33
STRATHPEFFER SPA	15·1	-18·1	12	- 15	WORKSOP	60·2	+22·9	52	+ 20	VENTNOR HOSPITAL	84·0	+36·7	74	+ 32
EDINBURGH	44·6	+11·0	37	+ 9	THURCASTON	78·1	+37·7	67	+ 33	BOURNEMOUTH	—	—	—	—
COCKLE PARK	67·1	—	56	—	TUNBRIDGE WELLS	88·5	—	78	—	MARLBOROUGH	80·7	+37·7	71	+ 33
NEWCASTLE-ON-TYNE	51·3	—	43	—	MARGATE	69·5	+25·1	61	+ 22	SOUTHPORT	71·7	—	61	—
YORK	63·4	+23·8	54	+ 20	BROADSTAIRS	—	—	—	—	RHYL	74·3	—	64	—
CROMER	80·5	—	69	—	RAMSGATE	—	—	—	—	ABERDOVEY	58·3†	—	51†	—
LOWESTOFT	—	—	—	—	EASTBOURNE	89·6	+37·6	79	+ 33	TENBY	67·6	+17·3	59	+ 15
HOLLESLEY BAY	—	—	—	—	BRIGHTON	72·6	+20·6	64	+ 18	TORQUAY	77·8	+25·7	69	+ 23
DUNMOW	86·2	—	75	—	WORTHING	86·6	—	77	—	NEWQUAY	73·1	+22·8	65	+ 20
					BOGNOR	89·3†	—	79†	—	GUERNSEY	77·8†	+19·8	70†	+ 18
					WATERGATE PARK	80·3	—	71	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 27.] *Third Series.* WEEK ENDING SATURDAY, JULY 11TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 158.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	73	39	58·1	46·5	51·9	2 below	69	−14	0	0	813	− 42	491	− 47
	1. SCOTLAND, EAST	78	35	63·4	47·8	55·1	1 below	92	− 8	0	0	972*	− 78	502	− 81
	2. ENGLAND, N.E.	86	39	67·3	50·8	58·5	0 (average)	116	+ 5	0	0	1109	+ 16	342	−137
	3. ENGLAND, EAST	86	42	70·9	52·7	61·2	2 above	134	+ 9	0	0	1346	+ 25	322	−203
	4. MIDLAND COUNTIES	87	38	71·5	51·6	60·9	2 above	132	+11	0	0	1281	− 67	355	−180
	5. ENGLAND, SOUTH	85	42	71·0	53·5	61·7	2 above	138	+ 6	0	0	1429	− 23	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	73	40	64·4	50·7	57·1	0 (average)	106	+ 3	0	0	1110	− 21	317	− 96
	7. ENGLAND, N.W.	78	40	64·9	51·7	57·8	1 below	111	− 3	0	0	1216	+ 2	259	−129
	8. ENGLAND, S.W.	83	43	68·7	52·7	60·1	1 above	127	+ 8	0	0	1417	+ 38	162	−138
	9. IRELAND, NORTH	76	40	63·8	51·7	57·3	1 above	107	+ 2	0	0	1142	− 79	286	− 61
	10. IRELAND, SOUTH	79	41	67·1	53·7	59·9	2 above	125	+10	0	0	1427	+ 7	183	− 67
	— CHANNEL ISLANDS	82	53	68·5	57·3	62·5	2 above	144	+14	0	0	1637	+ 67	49	− 68

Rainfall.

Bright Sunshine.

	DISTRICTS. (See p. 158.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	20	12 more	131	+20	35·9	+13·4	19	−12	15	−10	572	−119	23	− 5
	1. SCOTLAND, EAST	4	10	3 more	110	+14	18·9	+ 4·8	32	− 5	27	− 4	659	−101	27	− 4
	2. ENGLAND, N.E.	2	7	1 more	89	0	11·8	+ 0·5	41	0	35	0	733	− 56	30	− 2
	3. ENGLAND, EAST	1	less than half	5 less	78	−13	12·0	+ 1·1	52	+ 4	45	+ 4	870	− 22	36	− 1
	4. MIDLAND COUNTIES	2	3	3 less	88	+ 2	15·3	+ 2·4	56	+17	48	+15	744	− 20	31	− 1
	5. ENGLAND, SOUTH	1	less than half	5 less	90	+ 5	15·2	+ 2·7	65	+19	58	+17	912	+ 18	38	+ 1
Principal Grazing Districts.	6. SCOTLAND, WEST	2	6	2 less	118	+18	30·9	+ 8·4	41	+ 1	35	+ 1	725	− 78	30	− 3
	7. ENGLAND, N.W.	2	7	0 (average)	107	+14	18·3	+ 3·5	40	− 2	35	− 2	809	+ 19	33	+ 1
	8. ENGLAND, S.W.	1	1	5 less	102	+ 6	21·1	+ 3·7	67	+18	59	+16	866	− 75	36	− 3
	9. IRELAND, NORTH	3	1	6 less	127	+14	20·6	+ 4·4	31	− 1	27	− 1	647	−110	26	− 5
	10. IRELAND, SOUTH	2	1	6 less	115	+13	23·2	+ 4·4	27	−10	23	− 8	727	−121	30	− 9
	— CHANNEL ISLANDS	1	1	4 less	110	+12	14·8	+ 0·5	76	+22	69	+20	1028*	− 39	43	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather. The conditions over England during this week were generally fine and warm, but in Scotland the weather was frequently dull and occasionally rainy, and in Ireland, although very little rain was experienced, there was a good deal of cloud. Thunder was heard at Fort William on Monday, and on Saturday evening a very severe thunderstorm occurred over the north-east of England. At Fulbeck the storm was accompanied by exceptionally large hailstones.

Temperature was above the mean as a whole, but below it in Scotland N. and E. and England N.W., and only equal to it in Scotland W. and England N.E. The highest of the maxima, which were registered either on Friday or Saturday over England, and about the middle of the week over Ireland and Scotland, ranged from 87° in the Midland Counties, 86° in England E. and N.E., and 85° in England S. to 76° in Ireland N., and to 73° in Scotland N. and W. The lowest of the minima, recorded, as a rule, during the earlier half of the week, varied from 35° in Scotland E., and 38° in the Midland Counties, to 43° in England S.W., and to 53° in the Channel Islands. At Harrogate, a thermometer exposed on the grass on the night of Tuesday sank to 30·1.

Rainfall was in excess of the mean in Scotland N. and E., and also (owing to the thunderstorm noted above) in England N.E., and just equal to the normal in England N.W; elsewhere there was a deficit. In many parts of England the fall was scarcely appreciable.

Bright Sunshine exceeded the mean in almost all English districts, and the Channel Islands, but was deficient over Ireland and Scotland. The percentage of the possible duration ranged from 69 in the Channel Islands, 59 in England S.W., and 58 in England S., to below 30 over Ireland and in Scotland E., and to no more than 15 in Scotland N.

Barometer and Wind. During the earlier days of the week, a well-marked and deep cyclonic disturbance moved eastwards across Scotland and the North Sea causing some unusually heavy falls of rain in Scotland, and gales—mostly from between N.W. and N.E.—on many parts of our northern coasts. This system was followed by an anticyclone which spread over the southern half of our Islands from the south-westward, and which held its position until the end of the period, when however, it was decreasing steadily in intensity, and the distribution of pressure over our Islands and their neighbourhood was undergoing a change.

207 | 70 Wy. & S. Ltd
319 | 90 12 | 02

II.—DATA from which the SUMMARY on page 157 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	58	44	54·0	46·3	49·9	− 2·0	55	0	4	0·70	+ 0·19	*	*	*	*
	Stornoway	64	39	57·1	45·1	50·7	− 3·2	61	0	6	1·87	+ 1·22	23·9	− 10·4	19	− 9
	Wick	71	39	59·1	45·6	51·9	− 2·5	69	0	4	2·72	+ 2·19	*	*	*	*
	Lairg $	73	40	62·0	45·4	53·1	− 0·8	78	0	7	1·69	+ 1·03	*	*	*	*
	Glencarron $	60	41	55·9	46·1	50·7	− 3·6	61	0	7	2·96	+ 1·64	*	*	*	*
	Fort Augustus $	64	42	59·6	47·7	53·2	− 2·7	78	0	6	1·37	+ 0·71	14·7	− 8·7	12	− 7
	Fort William	63	44	59·2	49·4	54·0	− 2·0	84	0	6	2·54	+ 1·42	20·7	− 10·9	17	− 9
1. SCOTLAND, E.	Nairn	69	37	61·0	46·4	53·2	− 3·0	78	0	6	1·52	+ 0·96	*	*	*	*
	Aberdeen	78	38	62·0	48·4	54·7	− 1·6	89	0	4	1·75	+ 1·16	19·2	− 19·6	16	− 16
	Braemar $	67	35	60·3	45·5	52·4	− 1·5	73	0	4	0·74	+ 0·14	*	*	*	*
	Ochtertyre $	74	40	66·9	48·1	56·9	− 0·6	104	0	3	1·08	+ 0·41	*	*	*	*
	Leith	75	41	66·9	50·4	58·1	+ 0·3	113	0	3	0·30	− 0·26	*	*	*	*
	Marchmont $	—	45	—	51·0	—	—	—	—	2	0·38	− 0·36	41·5	+ 2·2	35	+ 2
2. ENGLAND, N.E.	Alnwick Castle	77	39	64·8	49·7	56·7	+ 0·2	103	0	2	0·53	− 0·06	*	*	*	*
	Durham	78	39	66·8	50·3	58·0	+ 0·1	112	0	3	0·53	− 0·07	35·8	− 2·0	31	− 2
	Shields	78	45	64·6	51·6	57·7	+ 0·7	110	0	2	0·24	− 0·30	*	*	*	*
	Scarborough $	83	42	67·6	49·8	58·1	0·0	113	0	5	0·94	+ 0·37	32·6	—	28	—
	Spurn Head	77	47	64·9	51·9	58·0	− 1·1	112	0	1	0·90	+ 0·54	*	*	*	*
	Fulbeck (Lincolnshire)	86	40	75·2	51·3	62·4	+ 2·7	143	0	1	0·79	+ 0·30	52·1	—	45	—
3. ENGLAND, E.	Hillington $	86	44	71·3	52·3	61·1	+ 1·4	134	0	3	0·08	− 0·52	46·5	+ 1·7	40	+ 1
	Yarmouth	69	45	64·4	52·1	57·8	− 1·5	111	0	2	0·13	− 0·44	*	*	*	*
	Geldeston	83	43	69·8	52·1	60·3	+ 1·0	128	0	1	0·06	− 0·48	43·3	− 4·6	38	− 4
	Cambridge	86	42	73·7	53·0	62·6	+ 2·0	144	0	0	0·00	− 0·52	54·5	+ 8·8	48	+ 8
	Felixstowe	81	43	75·6	52·9	63·5	+ 3·9	151	0	1	0·01	—	60·0†	—	53†	—
	Rothamsted	82	44	71·2	52·4	61·2	+ 1·8	134	0	1	0·02	− 0·54	59·0	+ 11·7	52	+ 10
	Shoeburyness	75	45	70·4	54·4	61·8	+ 1·6	139	0	0	0·00	− 0·39	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	78	40	67·8	50·5	58·6	+ 1·6	116	0	3	0·88	+ 0·23	48·4	—	42	—
	Bawtry (Hesley Hall)	86	40	72·1	51·1	60·9	+ 1·8	132	0	2	0·43	− 0·14	*	*	*	*
	Loughborough	87	42	72·8	51·9	61·6	+ 0·8	137	0	3	0·11	− 0·39	*	*	*	*
	Colly Weston (Stamford)	86	40	73·7	52·1	62·2	+ 1·9	141	0	1	0·13	− 0·40	*	*	*	*
	Cheadle $	82	43	67·4	51·8	59·1	+ 2·0	120	0	2	0·46	− 0·21	*	*	*	*
	Birmingham (Edgbaston)	84	45	70·6	53·5	61·5	+ 2·2	137	0	2	0·12	− 0·48	47·8	—	42	—
	Churchstoke $	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford $	84	40	73·1	50·3	60·9	+ 1·0	132	0	2	0·13	− 0·37	*	*	*	*
	Cirencester	83	38	72·9	49·6	60·4	+ 1·3	129	0	1	0·07	− 0·53	72·3	+ 27·7	63	+ 24
	Oxford	84	44	72·9	53·7	62·6	+ 2·4	144	0	0	0·00	− 0·54	62·2	+ 16·8	55	+ 15
5. ENGLAND, S.	London	85	45	74·1	54·0	63·4	+ 1·7	150	0	0	0·00	− 0·50	57·3‡	+ 15·3‡	51‡	+ 14‡
	Swarraton (Alresford) $	81	42	71·8	51·0	60·7	+ 2·4	131	0	0	0·00	− 0·55	*	*	*	*
	Dungeness	72	42	68·4	52·9	60·1	− 0·1	127	0	1	0·01	− 0·34	62·1	—	55	—
	Hastings (St. Leonards)	75	47	68·7	54·2	61·0	+ 0·9	133	0	1	0·04	− 0·42	62·1	+ 9·1	55	+ 8
	Southampton	83	47	75·4	55·4	64·7	+ 3·0	159	0	1	0·03	− 0·51	73·0	+ 23·5	65	+ 21
	Portland Bill	77	50	68·4	55·1	61·3	+ 2·3	135	0	1	0·09	—	*	*	*	*
	Shaftesbury $	80	44	70·2	52·1	60·5	+ 2·3	130	0	1	0·11	− 0·52	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Glasgow	71	44	63·1	52·0	57·2	+ 0·2	106	0	2	0·32	− 0·40	34·1	+ 0·9	29	+ 1
	Cally $	73	40	66·6	49·6	57·5	+ 0·7	109	0	1	0·49	− 0·34	*	*	*	*
	Aspatria	72	40	63·9	50·1	56·5	− 1·1	102	0	2	0·52	—	41·3	—	35	—
	Douglas (Isle of Man)	73	45	63·9	51·2	57·1	+ 0·1	106	0	3	0·97	+ 0·34	46·7	+ 0·8	40	+ 1
7. ENGLAND, N.W.	Newton Rigg	78	41	65·7	48·4	56·5	− 0·1	102	0	3	0·91	—	34·8	—	30	—
	Stonyhurst	71	45	63·7	51·7	57·3	− 0·7	107	0	3	1·21	+ 0·32	35·9	− 5·1	31	− 4
	Blackpool	68	50	62·6	53·5	57·7	− 1·3	110	0	3	1·25	+ 0·60	34·5	− 7·5	30	− 7
	Manchester (Prestwich)	78	45	67·1	50·9	58·4	+ 0·1	115	0	3	0·68	− 0·09	38·2	—	33	—
	Liverpool Obsy. (Bidston)	70	49	63·9	53·7	58·4	− 0·7	115	0	2	0·36	− 0·22	32·1	—	28	—
	Chester (Hawarden Bridge)	75	40	67·7	50·3	58·4	− 1·1	115	0	1	0·20	—	*	*	*	*
	Llandudno $	78	49	67·5	53·8	60·2	+ 0·9	127	0	2	0·28	− 0·25	49·0	+ 7·1	43	+ 6
	Holyhead	70	49	60·7	51·1	55·6	− 2·5	95	0	2	0·46	− 0·08	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	69	47	61·3	52·1	56·4	− 1·3	101	0	2	0·18	− 0·35	43·9	− 4·1	39	− 4
	Clifton	81	47	72·0	54·3	62·5	+ 2·3	144	0	1	0·01	− 0·62	*	*	*	*
	Bath	82	43	72·4	52·1	61·5	+ 0·8	137	0	1	0·01	− 0·55	71·7	—	64	—
	Arlington (N. Devon)	77	46	67·0	50·3	58·1	+ 0·2	113	0	1	0·26	− 0·64	*	*	*	*
	Cullompton $	83	43	72·9	51·0	61·2	+ 1·0	134	0	1	0·12	− 0·49	65·1	+ 22·0	58	+ 20
	Falmouth	74	52	67·4	55·9	61·3	+ 1·9	135	0	2	0·13	− 0·51	75·3	+ 23·5	67	+ 21
	Plymouth	77	50	68·1	52·9	60·0	− 0·4	126	0	1	0·13	− 0·44	76·2	+ 28·5	68	+ 25
9. IRELAND, N.	Malin Head	66	40	59·4	50·9	54·9	− 1·3	90	0	5	0·10	− 0·50	*	*	*	*
	Edenfel (Omagh)	75	46	65·0	51·9	58·0	+ 1·7	112	0	3	0·10	− 0·63	*	*	*	*
	Blacksod Point	62	45	60·3	53·0	56·4	− 0·8	101	0	3	0·03	− 0·62	*	*	*	*
	Markree Castle	75	40	65·4	51·1	57·8	+ 1·5	111	0	2	0·09	− 0·69	26·7	− 4·3	23	− 4
	Armagh	76	43	67·4	52·0	59·2	+ 2·2	120	0	2	0·21	− 0·45	35·6	+ 2·0	30	+ 2
	Donaghadee	75	44	65·4	51·0	57·7	+ 0·6	110	0	2	0·08	− 0·54	*	*	*	*
10. IRELAND, S.	Dublin	79	44	70·1	53·9	61·4	+ 2·0	136	0	3	0·28	− 0·26	44·5	+ 5·3	39	+ 5
	Birr Castle	74	41	66·4	50·4	57·8	− 0·1	111	0	3	0·29	− 0·35	19·6	− 13·5	17	− 12
	Kilkenny	77	42	69·0	53·7	60·8	+ 2·3	132	0	3	0·07	− 0·50	*	*	*	*
	Waterford	73	44	68·9	52·4	60·1	+ 0·8	127	0	0	0·00	− 0·67	*	*	*	*
	Roche's Point	73	50	65·1	54·6	59·5	+ 0·5	123	0	3	0·05	− 0·62	*	*	*	*
	Valencia	68	53	63·6	55·9	59·5	+ 1·4	123	0	3	0·05	− 0·80	16·7	− 20·1	15	− 18
	Killarney	78	50	67·9	56·1	61·6	+ 3·7	137	0	2	0·21	− 0·55	*	*	*	*
	Foynes	73	48	65·6	52·9	58·8	+ 1·6	118	0	1	0·05	− 0·61	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	72	54	65·6	56·9	61·0	+ 1·5	133	0	1	0·07	− 0·42	67·0	+ 16·2	60	+ 14
	Jersey	82	53	71·3	57·6	64·0	+ 2·7	154	0	1	0·05	− 0·45	80·6	+ 25·2	73	+ 23

Stations Marked $ are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

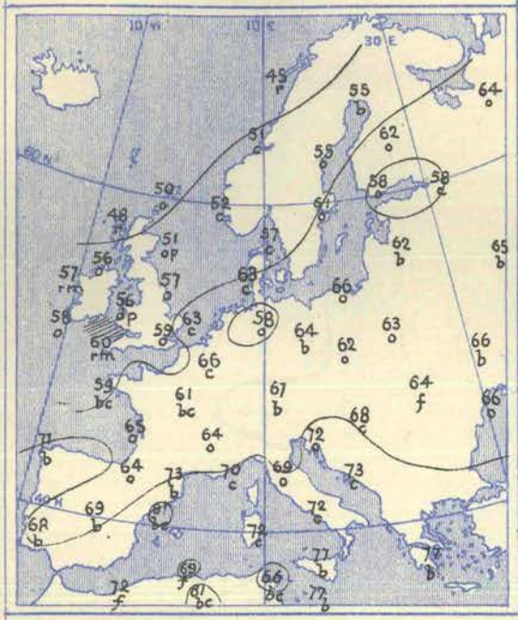
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

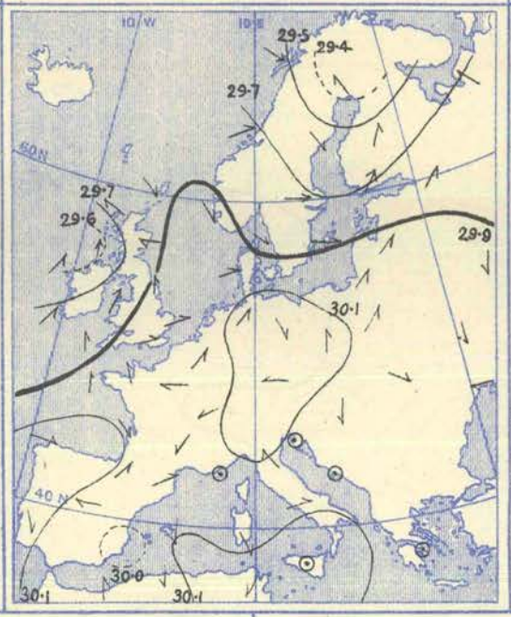
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 5th July, 1903.

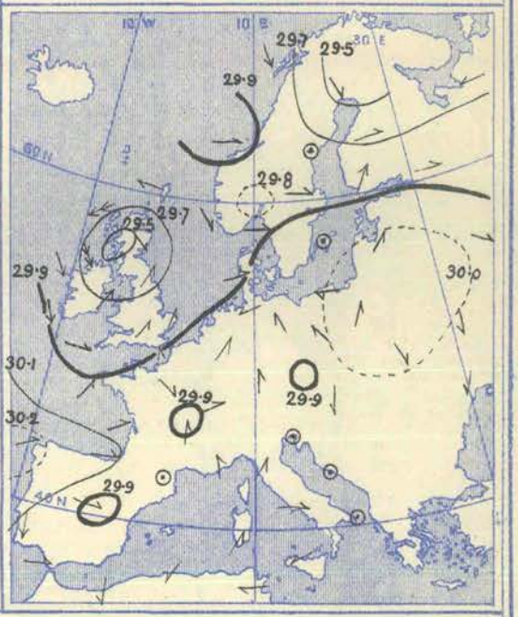
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine or fair in most parts of the Continent, but rainy at Bodö, and cloudy or dull in most British districts, with rain in the north and west. Rain falling at all except our south-eastern stations later, and also in many French, Russian, and Scandinavian and a few German localities. Amounts unusually heavy in Scotland—as much as 2·5 ins. at Wick, and more than an inch at Stornoway and Nairn. Thunderstorms occurring in the south of France, accompanied by 1·65 ins. of rain at Cape Béarn.

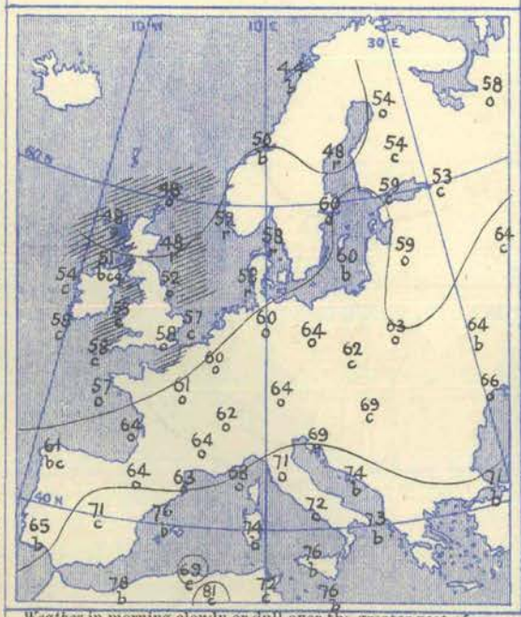
Temperature fallen as a whole. Morning readings highest, 81° at Aumale and Barcelona, 80° at Palma, 77° at Athens and Palermo, and 76° at Leghorn; above 76° in most southern regions and several degrees above 60° over the major portion of central Europe and Russia. Lowest, 45° at Bodö, 48° at Wick and in the Hebrides, 51° at Aberdeen, and 56° at Spurn Head and Pembroke. Maxima during day below 70° in our Islands, but above 80° in most of the southern regions, and above 90° in most places. Highest readings of all, 96° at Madrid and 100° at Sanguinaires. Highest reading at Stornoway only 49°

Wind at 8 a.m. increasing in force from between South-West and South and East over these Islands, and another partial cyclonic circulation shown over northern Europe. Light and anticyclonic all over the central and southern countries. A complete and well-defined cyclonic movement shown over the United Kingdom by evening, the Easterly wind at Stornoway and that from North-West in the north of Ireland blowing with the force of a gale. No material change over Europe as a whole.

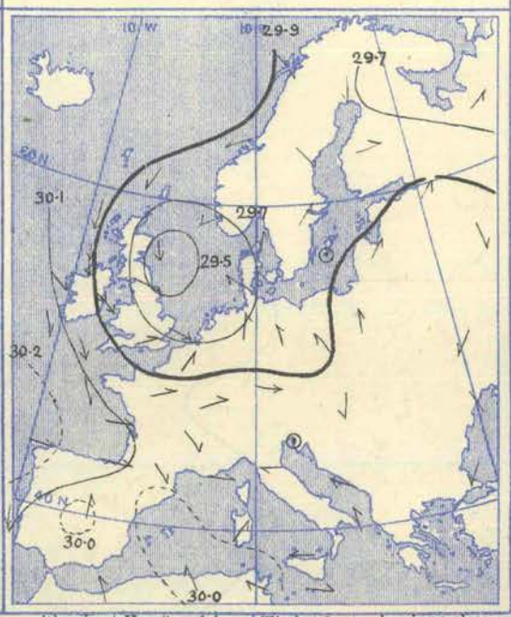
Barometer at 8 a.m. ranging from 30·1 ins. in an anticyclone lying over central Europe to below 29·6 ins. in a depression approaching our north-west coasts, and to below 29·4 ins. in another over Lapland. Both low pressure systems moving eastwards later, and that reaching Scotland proving to be very deep for the time of year, and the gradients in its rear and on its northern side unusually steep. Another disturbance forming over the centre of Spain. Anticyclone over the central countries giving way slowly.

Monday, 6th July, 1903.

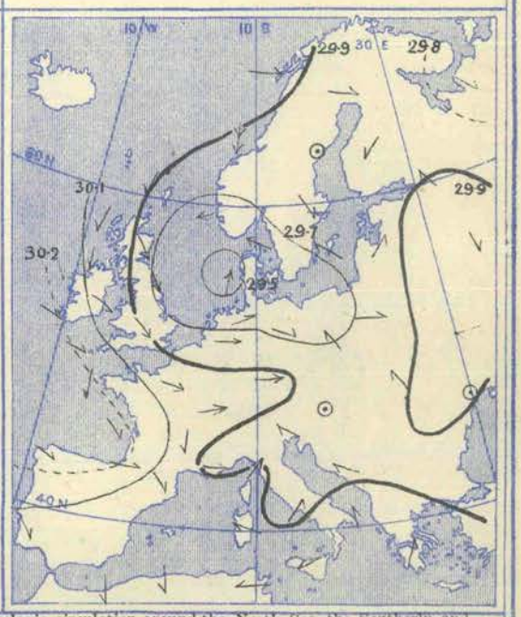
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over the greater part of our area, with rain at Hernösand, in Denmark, the south of Norway, and over Scotland, fine and bright over Italy, Greece, and in Portugal. Some rain later at our own northern stations, and also over the northern half of the Continent and the south of Austria. More than an inch at Oxö and Buda-Pesth, and as much as 2·32 ins. at Trieste.

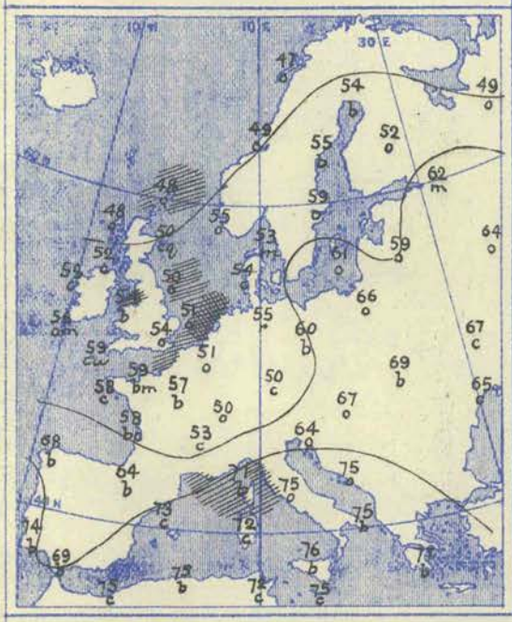
Temperature again fallen in most places. Ranging at 8 a.m. from 81° at Aumale and above 70° in the southern regions generally, to below 50° in Scotland and at some stations in Scandinavia. Absolute lowest reading, 44° at Bodö. Maxima during day above 80° in different parts of Germany, Austria-Hungary, and the south of France, and at nearly all stations bordering the Mediterranean, and again as high as 100° at Sanguinaires. Thermometer not recording values higher than 66° at most of our own stations, and but little above 50° in the north of Scotland and at Spurn Head. Dungeness, however, had a reading of 70°.

Wind at 8 a.m. showing a clear cyclonic circulation around the North Sea, the Southerly and Easterly current on the eastern side being light or moderate in force, and that from North to North-West over the United Kingdom having the strength of a gale in most northern and north-western localities, and of a strong breeze in the south. Light and variable winds prevailing over southern and eastern Europe. Gales subsiding by evening on many of our coasts but continuing at Spurn Head and Liverpool; a Northerly gale springing up at Christiansund.

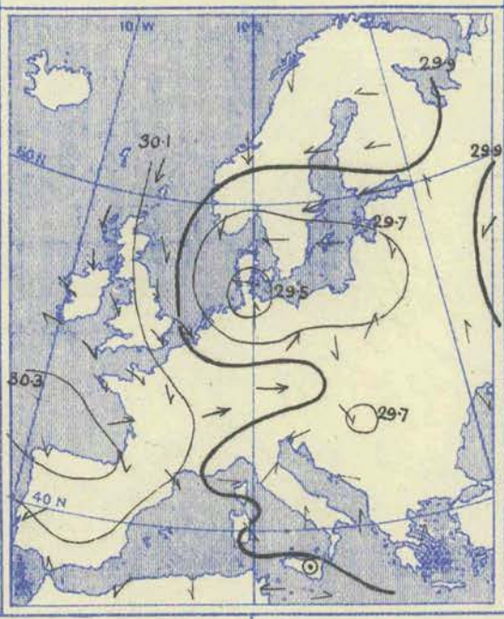
Barometer at 8 a.m. highest, above 30·2 ins. to the north-westward and westward of the Iberian Peninsula; lowest, about 29·4 ins. or less, in a large and deep depression having its minimum over the centre of the North Sea. No higher than 29·7 ins. in another system in the extreme north of Russia, and less than 30·0 ins. in a shallow area over the western portion of the Mediterranean. Main disturbance moving steadily eastwards during day and gradients on its western side becoming rather less steep. Anticyclone from the Atlantic extending eastwards and northwards.

Tuesday, 7th July, 1903.

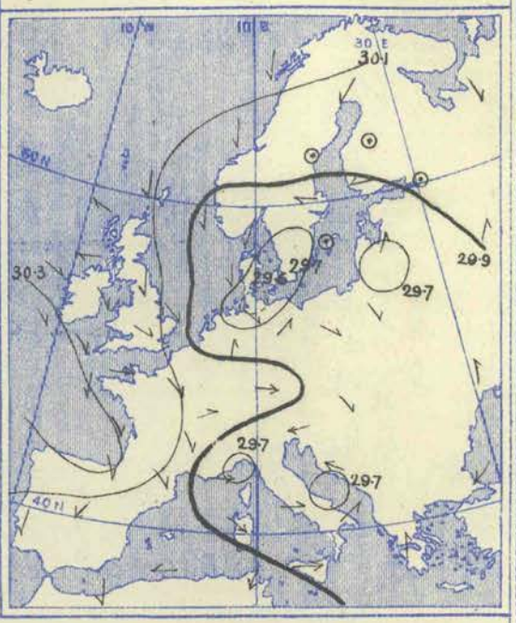
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull generally, but fine and bright in the Spanish Peninsula, Algeria, several parts of France, and at some English stations. Rainy in Holland and at the mouth of the Elbe, and also at Vienna and Cracow. Squally on the east coasts of Great Britain. Rain later on our extreme north and west coasts, and in most Continental regions. Heaviest amount, 1·54 ins. at Faerder.

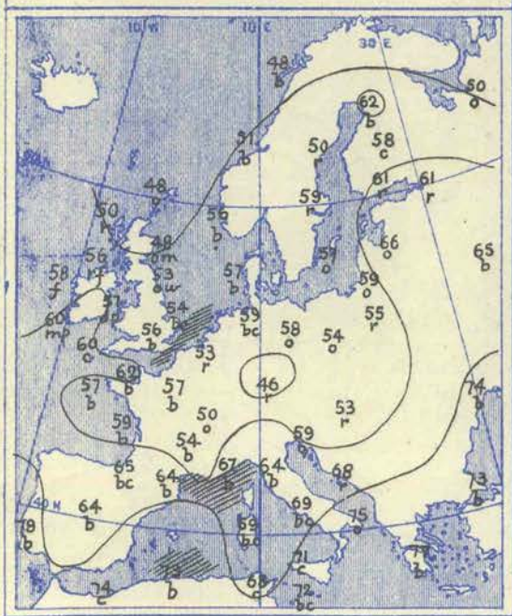
Temperature fallen generally—quickly over Germany and the east of France—but risen in Poland and Portugal. Morning readings highest, 77° at Oporto and Athens, and above 70° in the extreme south generally, 69° at Lemberg, and Nicolaieff, and 64° at Moscow. Lowest, 47° at Bodö, 48° in the north of Scotland, 49° at Archangel, 51° at Brussels and Yarmouth, and 53° at Portland Bill and Bath. Rising no higher than 66° in our Islands during day, only touching 59° at Frankfürt, but exceeding 70° in the south of France, most parts of Russia and Austria-Hungary, 80° in Italy and on the coast of Algeria, 93° at Madrid and Lisbon, and to 108° at Biskra.

Wind at 8 a.m. showing a very extensive cyclonic circulation around Denmark, the force being fresh or strong in nearly all places. Another cyclonic movement of strong winds prevailing around the Gulf of Genoa. No important change in direction later, but force of wind decreasing very generally.

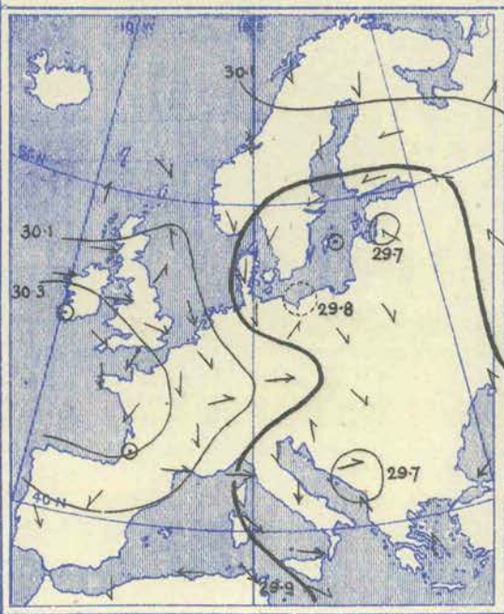
Barometer risen in the west and extreme north of Europe, fallen elsewhere. Morning readings ranging from 30·3 ins. and upwards in an anticyclone over the Bay of Biscay, to 29·7 ins. and less (1) in a small depression over the Gulf of Genoa, and (2) in a similar minimum near Buda-Pesth, and to about 29·4 ins. in the centre of a deep disturbance on the west coast of Denmark. Anticyclone spreading northwards and eastwards later. Main depression moving slowly eastwards, becoming much modified in form and less deep. Two other baric minima (shallow) appearing over the eastern half of Europe.

Wednesday, 8th July, 1903.

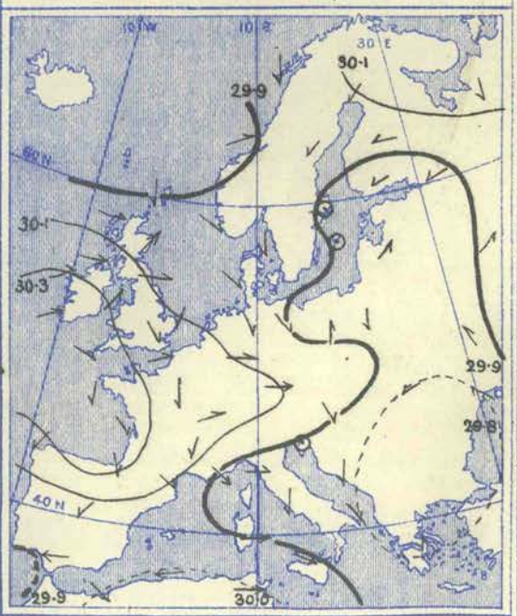
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning varying greatly in different localities; fine and bright at several stations cloudy or dull in others, and rainy over the Baltic, at Warsaw, Buda-Pesth, and Lésina, as well as on our north and west coasts. Nearly an inch of rain falling at Hernösand later, and considerable amounts in various parts of central Europe and Russia.

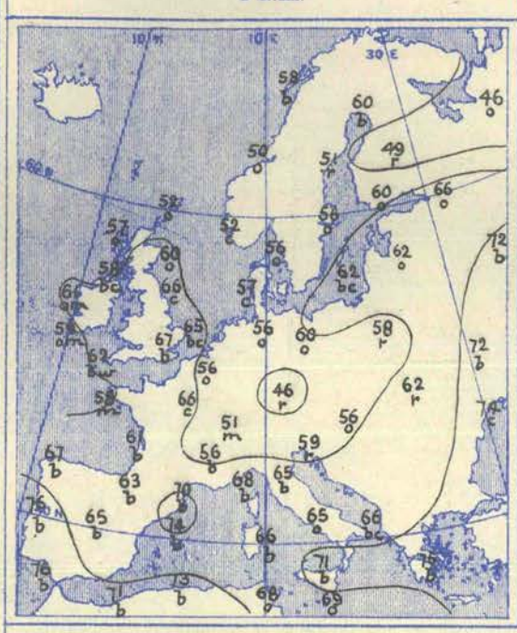
Temperature risen over our Islands, Denmark, and Finland, fallen in most other regions. Morning readings above 70° on the shores of the Mediterranean and Black Sea, and also on the coast of Portugal; highest values 78° at Lisbon, and 77° at Athens. Below 50° at Bodö and at most Scotch stations, and as low as 46° at Munich, 50° at Belfort, and 53° at Brussels. Rising subsequently to 70° in London, to a few degrees higher in Ireland, to a little above or slightly below 80° over southern Europe, to 90° at Tunis, and to 91° at Lisbon. Maximum at Munich only 50°.

Wind at 8 a.m. showing three cyclonic circulations—two over the Baltic and north Germany, and the other around the Adriatic. Light anticyclonic airs prevailing over the major portion of our Islands and the Spanish Peninsula, but fresh Westerly winds in Ireland, and a moderate Southerly breeze in the Hebrides. Cyclonic circulations becoming much less distinct by evening and in some localities almost dying out.

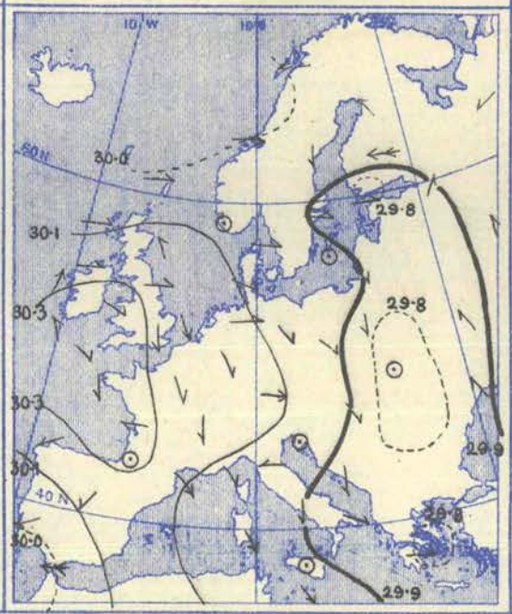
Barometer risen except in the most southern countries, and in the Hebrides. Ranging at 8 a.m. from 30·3 ins. and upwards in an anticyclone extending from the Bay of Biscay over the south-west of Ireland and England, and the west of France, to 29·8 ins. and less in a depression over north Germany, and to 29·7 ins. and less (1) in a minimum near Riga, and (2) in another over the Adriatic. Both anticyclonic and cyclonic systems moving eastwards later, and the latter becoming far less well defined. A fresh but shallow depression appearing off the north of Scotland.

Thursday, 9th July, 1903.

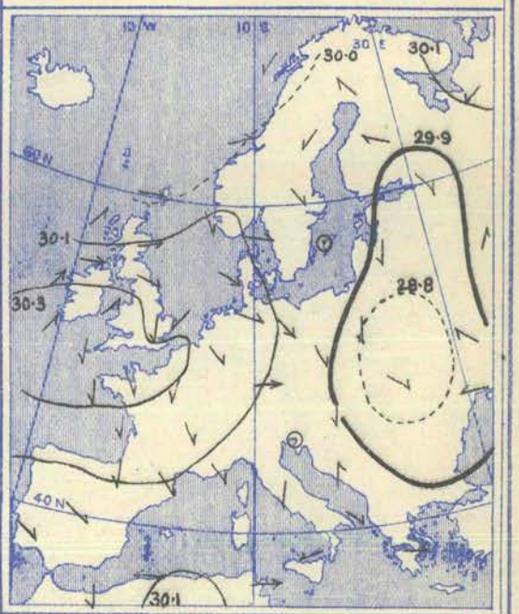
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over southern and western Europe generally, but cloudy or dull in Scotland and the West of Ireland. Dull in most other regions, with rain in many parts of central Europe, as well as at Hernösand and Kuopio. More than an inch of rain falling at some Austrian stations later, and rather heavy falls in some parts of Russia and Germany. Relatively slight falls occurring in various Scandinavian districts.

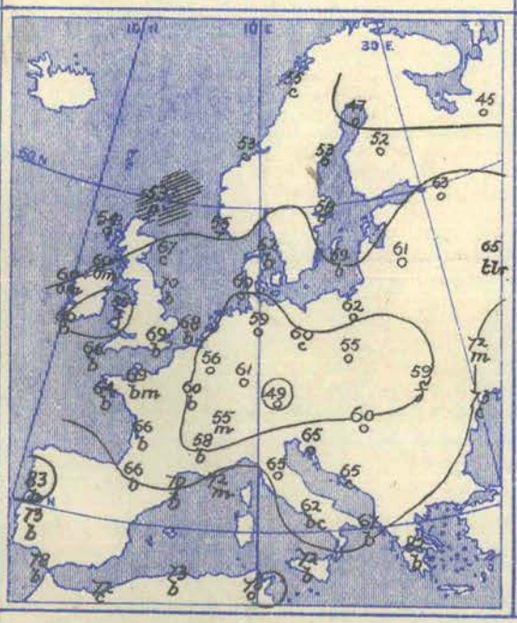
Temperature fallen in Italy, Algeria, and Finland; risen elsewhere—very briskly over our Islands. Morning readings highest, 76° on the west and south coasts of the Iberian Peninsula, and not many degrees lower in several other southern regions, 63° at Bath, and 72° at Moscow. Lowest, (1) 46° at Archangel, (2) 50° at Christiansund, and 52° in the Shetlands, (3) 46° at Munich, 51° at Belfort, and 52° at Vienna. Rising during day to 75° at Donaghadee, 78° or 79° over the south of England, and to above 80° over Spain, Greece, and at some southern French stations. Munich maximum no higher than 50°.

Wind light and anticyclonic over the United Kingdom and the neighbouring portion of the Continent, but strong to a gale from the Eastward (cyclonic) over the south-west of Spain, and light and irregularly cyclonic over the eastern half of Europe. Strong to a gale from East in Finland. No great change as a whole later, but gale in Finland dying down; that in the south-west of Spain continuing.

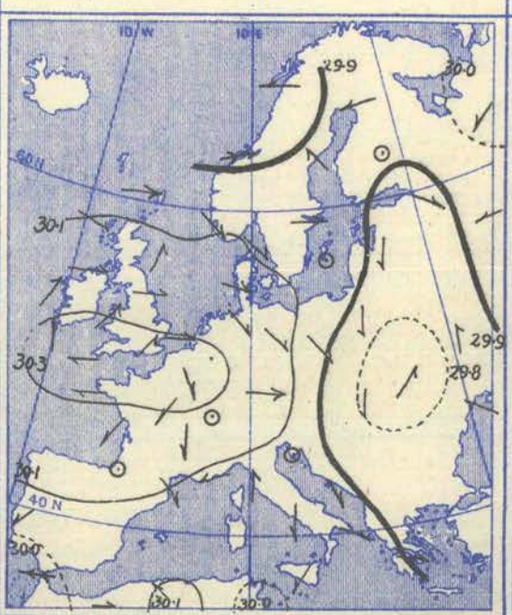
Barometer risen except in Finland and the north of Scandinavia. Morning readings ranging from 30·2 ins. to 30·3 ins. and upwards in an anticyclone extending from the Atlantic over Ireland, England, and France, to 30·0 ins. and less (1) off the south-west of Spain, and (2) off the west of Norway, and to below 29·8 ins. in an irregularly shaped and complex disturbance stretching from Greece to Finland. Latter system becoming rather less complex by evening and moving slowly eastwards, but no change taking place in the general distribution.

Friday, 10th July, 1903.

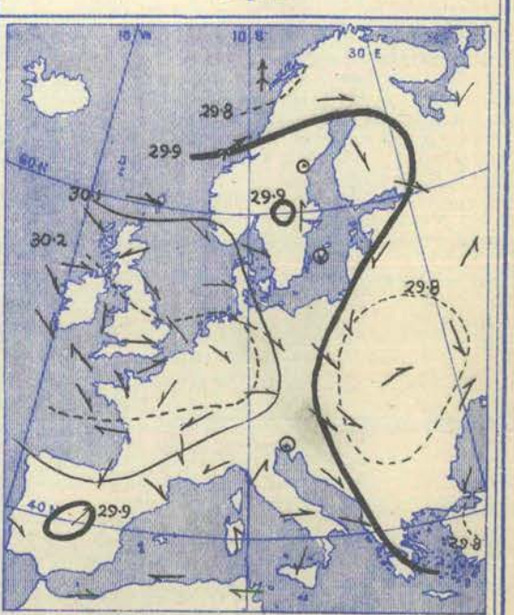
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over northern and central Europe, and also over the greater part of Russia, with rain at Skudesnaes, at some Austrian stations, and a thunderstorm at Moscow. Fine in most other regions, but cloudy or overcast on our west and north coasts, with fog on the coast of Wales, and drizzling rain at Parsonstown. A little rain falling at some of our northern and western stations later, and large quantities in Austria-Hungary, Poland, and at Breslau—as much as 3·10 ins. at Cracow.

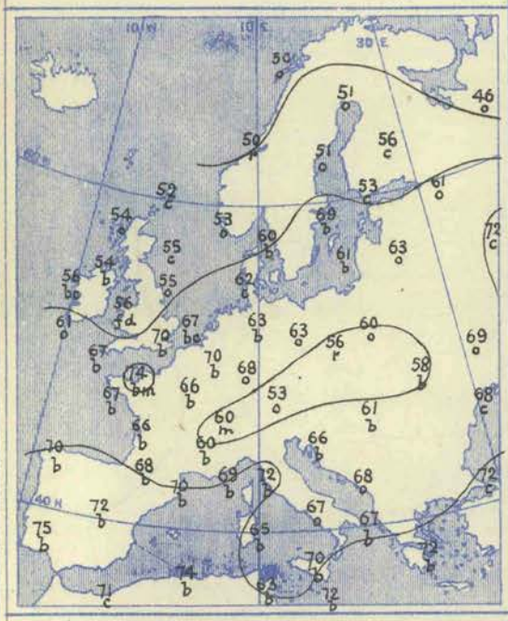
Temperature changed irregularly. Readings at 8 a.m. highest, 83° at Oporto, 82° at Patras, above 70° at many southern stations, 70° at Shields, and 69° in London. Lowest, (1) 45° at Archangel, 47° at Haparanda, (2) 49° at Munich, (3) 53° in the Shetlands. Rising later to 85° in London, to between 80° and 90° in most parts of southern Europe, and to 97° at Madrid. Thermometer remaining below 60° on our extreme north and north-west coasts.

Wind still anticyclonic over our Islands and the adjacent parts of the Continent, and cyclonic elsewhere. Of no great force generally, but Easterly gales continuing in the south-west of Spain, and a Westerly gale blowing at Christiansund. No great change occurring later, but a Southerly gale setting in in the extreme north of Norway, and a complete cyclonic circulation over the Iberian Peninsula.

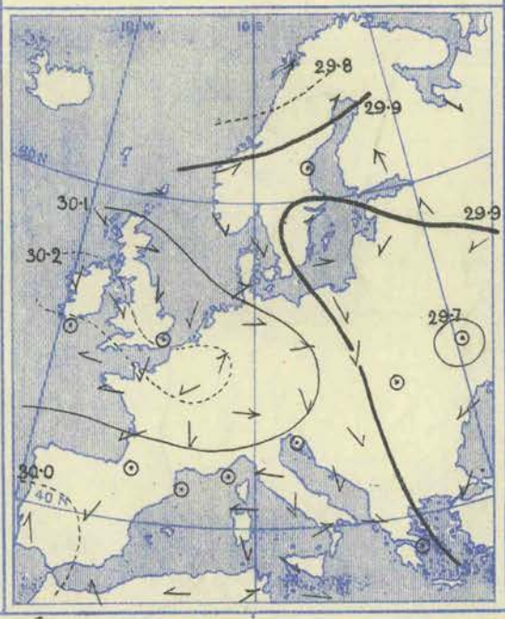
Barometer at 8 a.m. ranging from above 30·3 ins. in an anticyclone over the southern half of the United Kingdom, the north of France, and the Netherlands, to below 30·0 ins. over the south-west of Spain, and to below 29·8 ins. (1) in a depression over the north-west of Norway, and (2) in another system over Hungary. Anticyclone decreasing slowly in height during day, and a baric minimum (less than 29·9 ins.) appearing over central Spain.

Saturday, 11th July, 1903.

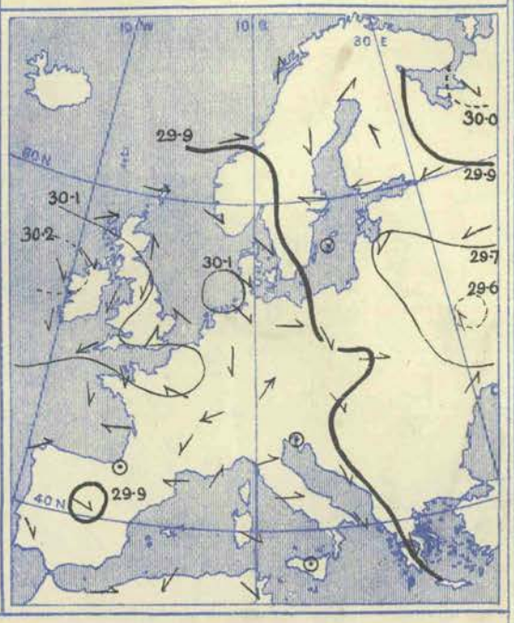
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather in morning fine and bright in most regions, but cloudy or overcast at many of our northern and western stations, as well as in various parts of northern and central Europe. Rainy at Breslau and Christiansund, and foggy on the Welsh coast, with drizzle at Holyhead. Rain falling later at our own western and northern stations, and at a few places in central Europe, and thunderstorms, accompanied by heavy rain and hail, occurring in Lincolnshire and Holland. Rainfall at Spurn Head and the Helder 0·90 in. and 1·58 ins. respectively.

Temperature fallen in Ireland, Scotland, the north of England, and Norway, risen in most other places. Morning readings highest, 75° at Lisbon, 74° at Algiers, and above 70° at several stations on the shores of the Mediterranean as well as over central Russia and Jersey; 70° in London. Lowest, 46° at Archangel, 50° at Bodö, 52° in the Shetlands, 53° at Nairn and Donaghadee, and 55° at Pembroke. Maxima exceeding 80° over southern England (85° in London), and as high as 90° in many parts of southern Europe. Highest reading of all, 100° at Madrid.

Wind at 8 a.m. light and anticyclonic over the western countries generally, but strong from between West and South-West (cyclonic) over the north of Scandinavia. A light or moderate cyclonic circulation prevailing over all the south-eastern parts of Europe. No general change later, but a cyclonic movement setting in over Spain.

Barometer at 8 a.m. ranging from 30·1 ins. to above 30·2 ins. in an anticyclone of decreasing intensity covering our Islands, the North Sea, and the major portion of France and Germany, to below 29·8 ins. over the north of Norway, and to less than 29·7 ins. in an extensive but shallow depression having its centre near Kiev. Anticyclone continuing to decrease slowly all day and becoming less regular in form. Another baric minima appearing over Spain by evening.

IV.—GENERAL NOTES, etc.

The chief features of the week were the passage of a deep depression eastwards across Scotland and east-south-eastwards across the North Sea, and the advance in its rear of an anticyclone from the Atlantic over England, Ireland, and France. The former, after reaching Germany and the Baltic, underwent much modification both in size and depth, and was finally joined by other systems from the south of Europe, and, together with these, formed a long and complex cyclonic system stretching from north to south over the eastern half of Europe.

The weather over western Europe was mainly under the influence of the anticyclone, although several depressions appeared for brief intervals over the Iberian Peninsula, while others in the far north moved towards Lapland. Much rain fell in Scotland on the northern side of the disturbance during Sunday, and large quantities were occasionally measured in various parts of the Continent. The winds over the major portion of our area were cyclonic, and, during the earlier days of the period, they were strong to a gale in force. Over the British Isles and their neighbourhood, the prevailing winds, after the first few days, when gales or strong Northerly breezes were experienced, were chiefly anticyclonic and of very little force. Temperature was fairly high in the southern regions throughout the period, but in most of the northern countries it was low for the time of year, both at the beginning and end of the week. Some very low readings were also recorded at Munich about the middle of the week, the thermometer often being below 50°.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶⟶ = a heavy gale; ⟶⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from Observations made at 8 a.m. in the British Islands, Belgium, Holland and Spain; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands, Belgium and Spain; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 158.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	20·1	−13·0	16	− 10
STRATHPEFFER SPA	12·9	−17·8	11	− 15
EDINBURGH	35·8	+ 2·5	30	+ 2
COCKLE PARK	43·7	—	37	—
NEWCASTLE-ON-TYNE	33·3	—	28	—
YORK	42·2	+ 2·4	36	+ 2
CROMER	43·6	—	38	—
LOWESTOFT	46·0	—	40	—
DUNMOW	63·4	—	56	—
SHEFFIELD	54·9	—	47	—
WORKSOP	44·8	+ 7·4	39	+ 7
THURCASTON	58·7	+18·4	51	+ 16
TUNBRIDGE WELLS	65·2	—	58	—
MARGATE	56·9	+11·9	50	+ 11
BROADSTAIRS	—	—	—	—
RAMSGATE	—	—	—	—
EASTBOURNE	63·3	+10·7	57	+ 9
BRIGHTON	63·9	+11·9	57	+ 11
WORTHING	66·6	—	60	—
BOGNOR	63·3†	—	57†	—
WATERGATE PARK	63·3	—	56	—
WESTBOURNE	64·9†	+14·3	58†	+ 13
VENTNOR HOSPITAL	70·8	+23·0	63	+ 21
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	72·0	+29·3	64	+ 26
SOUTHPORT	36·5	—	32	—
RHYL	44·0	—	38	—
ABERDOVEY	57·9†	—	51†	—
TENBY	62·0	+13·7	54	+ 12
TORQUAY	75·3	+24·7	67	+ 22
NEWQUAY	69·4	+20·2	62	+ 18
GUERNSEY	81·3†	+23·8	73†	+ 22

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 28.] *Third Series.* WEEK ENDING SATURDAY, JULY 18TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 164.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	66	37	58·0	45·0	51·1	4 below	64	−22	0	0	877	− 64	491	− 47
	1. SCOTLAND, EAST	69	35	58·3	46·2	51·8	5 below	69	−34	0	0	1041	−112	502	− 81
	2. ENGLAND, N.E.	72	43	61·4	50·5	55·6	3 below	95	−20	0	0	1204	− 4	342	−137
	3. ENGLAND, EAST	75	40	67·8	52·6	59·7	1 below	124	− 4	0	0	1470	+ 21	322	−203
	4. MIDLAND COUNTIES	74	40	66·0	50·6	57·7	2 below	110	−15	0	0	1390*	− 83	355	−180
	5. ENGLAND, SOUTH	77	42	67·4	53·9	60·2	0 (average)	127	− 8	0	0	1556	− 31	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	68	40	61·2	49·7	55·0	3 below	91	−15	0	0	1197*	− 40	317	− 96
	7. ENGLAND, N.W.	69	44	62·5	52·8	57·3	2 below	107	−10	0	0	1322	− 9	259	−129
	8. ENGLAND, S.W.	71	40	65·4	52·9	58·7	2 below	117	− 6	0	0	1534	+ 32	162	−138
	9. IRELAND, NORTH	72	44	61·3	51·4	56·0	1 below	98	−10	0	0	1240	− 89	286	− 61
	10. IRELAND, SOUTH	77	45	65·2	53·1	58·7	0 (average)	117	0	0	0	1544	+ 7	183	− 67
	— CHANNEL ISLANDS	75	49	67·1	56·1	61·2	0 (average)	134	0	0	0	1771	+ 67	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 164.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	4	4 less	134	+18	36·3	+13·0	42	+13	35	+11	614	−106	24	− 4
	1. SCOTLAND, EAST	5	14	7 more	115	+15	20·3	+ 5·5	19	−17	16	−15	678	−118	26	− 5
	2. ENGLAND, N.E.	5	12	7 more	94	+ 2	13·0	+ 1·2	20	−21	17	−18	753	− 77	29	− 3
	3. ENGLAND, EAST	5	8	3 more	83	−11	12·8	+ 1·3	25	−22	23	−16	895	− 43	35	− 2
	4. MIDLAND COUNTIES	4	6	0 (average)	92	+ 2	15·9	+ 2·4	22	−19	20	−17	766	− 39	30	− 2
	5. ENGLAND, SOUTH	3	5	1 less	93	+ 5	15·7	+ 2·7	42	− 9	38	− 8	954	+ 10	38	0
Principal Grazing Districts.	6. SCOTLAND, WEST	5	18	10 more	124*	+21	33·0*	+ 9·6	24	−14	20	−12	749	− 92	29	− 4
	7. ENGLAND, N.W.	5	12	5 more	112	+15	19·5	+ 4·0	28	−12	24	−10	837	+ 7	33	0
	8. ENGLAND, S.W.	4	6	0 (average)	106	+ 7	21·7	+ 3·6	38	− 9	34	− 8	904	− 83	36	− 3
	9. IRELAND, NORTH	6	15	8 more	133	+15	22·1	+ 5·2	11	−19	10	−16	658	−129	26	− 5
	10. IRELAND, SOUTH	6	18	11 more	121	+15	24·9	+ 5·4	24	−11	21	−10	751	−131	29	− 5
	— CHANNEL ISLANDS	3	6	0 (average)	113	+12	15·4	+ 0·6	57	+ 3	52	+ 3	1085	− 36	43	− 1

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was fine at the opening of the period, but gradually became very unsettled over the whole Kingdom. Very heavy rain was experienced at several western and northern stations between the 14th and 16th, and in London and at Shoeburyness on the 17th. Thunderstorms were rather general over the central and southern parts of England towards the end of the week.

Temperature was below the mean in most districts, the deficit in Scotland N. and E. being 4° and 5° respectively. In England S., Ireland S., and the Channel Islands, however, the mean was just equalled. The highest of the maxima were recorded on somewhat irregular dates as a whole, but on Wednesday over the more southern parts of England. They ranged from 77° in England S. and Ireland S., to below 70° in England N.W. and over Scotland. The maxima on the north and north-east coasts of Great Britain were frequently very low—55° or even less. The lowest of the minima—registered, as a rule, either on the 13th or 14th—varied from 35° in Scotland E., and 37° in Scotland N., to 40° or a little higher in most other districts, and to 49° in the Channel Islands. Thermometers exposed on the grass during the night of 13th–14th recorded 31·1° at Fort William and 32·1° at Hillington.

Rainfall exceeded the mean generally, but only just equalled it in the Midland Counties, England S.W., and the Channel Islands, and was less in Scotland N. and England S. The heaviest aggregate fall for the week was 2·72 ins. at Aspatria, but the heaviest amount for any one day was at Douglas on Tuesday, when 1·64 ins. was collected. This was closely followed by 1·50 ins., which fell within 5 hours in London during the early hours of Saturday.

Bright Sunshine was deficient excepting in Scotland N. and the Channel Islands. The percentage of the possible amount of duration ranged from 52 in the latter district, and 38 in England S., to less than 20 in Scotland E. and England N.E., and only 10 in Ireland N.

Barometer and Wind. At the commencement of the week an anticyclone was stretching over Ireland from the Atlantic, but the barometer was falling slowly generally, and during the next day or two the high pressure system moved slowly east-south-eastwards to the Continent, while a shallow depression began to extend very gradually over our Islands from the westward. This system eventually became rather complex, and finally affected the whole of the United Kingdom, the North Sea, and the western parts of the Continent. The wind, which was at first mainly North-Westerly or Northerly, slowly shifted to the South-Eastwards and Eastwards in the north, and to the Westward, South-Westward, or Southward over our southern districts, and at the end of the week had backed to the Northward in Ireland. It blew freshly or strongly from the Southward at some Irish stations on Tuesday or Wednesday, but had very little strength as a whole.

207 | 70 Wy. & S. Ltd
319 | 90 12 | 02

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	55	38	53·3	43·6	48·1	− 4·3	43	0	2	0·05	− 0·47	*	*	*	*
	Stornoway	61	39	58·6	44·1	50·9	− 3·4	62	0	4	0·27	− 0·40	52·5	+ 20·4	43	+ 17
	Wick	58	39	56·3	44·6	50·0	− 5·1	56	0	3	0·41	− 0·15	*	*	*	*
	Lairg §	66	37	61·4	41·7	50·9	− 3·6	64	1	3	0·26	− 0·42	*	*	*	*
	Glencarron §	61	37	57·9	44·9	51·0	− 3·8	63	0	4	0·31	− 1·06	*	*	*	*
	Fort Augustus §	64	37	58·9	47·2	52·6	− 3·9	74	0	4	0·99	+ 0·29	22·7	+ 1·0	19	+ 1
	Fort William	64	40	59·7	48·9	53·9	− 2·6	83	0	3	0·39	− 0·78	35·6	+ 6·2	30	+ 5
1. SCOTLAND, E.	Nairn	63	37	59·4	44·3	51·3	− 5·6	65	0	5	0·58	− 0·02	*	*	*	*
	Aberdeen	60	40	56·3	47·3	51·5	− 5·5	67	0	6	1·50	+ 0·86	26·2	− 11·4	22	− 10
	Braemar §	59	35	55·2	42·9	48·6	− 5·7	46	0	5	0·61	− 0·02	*	*	*	*
	Ochtertyre §	69	40	62.6	46·7	54·1	− 4·0	85	0	4	1·52	+ 0·82	*	*	*	*
	Leith	67	46	59·4	49·4	54·1	− 4·4	85	0	7	1·93	+ 1·34	*	*	*	*
	Marchmont §	62	42	56·9	46·7	51·4	− 5·2	66	0	5	1·93	+ 1·16	13·0	− 25·7	11	− 22
2. ENGLAND, N.E.	Alnwick Castle	63	43	58·1	48·9	53·2	− 4·1	78	0	7	2·19	+ 1·57	*	*	*	*
	Durham	65	43	60·8	49·9	55·0	− 1·9	91	0	6	2·02	+ 1·39	19·3	− 18·3	17	− 16
	Shields	65	45	58·6	50·4	54·2	− 3·5	85	0	5	1·67	+ 1·10	*	*	*	*
	Scarborough M	70	45	61·9	49·1	55·1	− 2·9	92	0	6	0·65	+ 0·05	25·2	—	22	—
	Spurn Head	71	50	63·3	53·3	58·0	− 1·7	112	0	2	0·41	+ 0·05	*	*	*	*
	Fulbeck (Lincolnshire)	72	44	65·5	51·4	58·0	− 2·2	112	0	3	0·41	− 0·11	20·4	—	18	—
3. ENGLAND, E.	Hillington M	75	40	67·7	50·3	58·4	− 2·2	115	0	4	0·78	+ 0·15	22·4	− 22·2	20	− 20
	Yarmouth	75	46	66·4	53·6	59·6	− 0·6	123	0	5	0·48	− 0·12	*	*	*	*
	Geldeston	75	41	68·7	50·8	59·1	− 1·1	120	0	5	0·80	+ 0·24	22·0	− 24·6	20	− 22
	Cambridge	75	47	68·6	52·5	60·0	− 1·4	126	0	5	0·49	− 0·04	23.8	− 22·1	21	− 20
	Felixstowe	72	47	67·7	54·1	60·4	− 0·3	129	0	5	1·03	—	29·5†	—	26†	—
	Rothamsted	73	43	66·4	51·8	58·6	− 1·6	116	0	4	1·03	+ 0·46	30·1	− 17·6	27	− 16
	Shoeburyness	74	49	69·3	55·4	61·9	+ 0·9	139	0	4	1·25	+ 0·85	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	71	44	63.5	50·0	56·3	− 1·6	100	0	4	0·78	+ 0·18	23·5	—	21	—
	Bawtry (Hesley Hall)	74	45	67·3	51·9	59·1	− 0·9	120	0	3	0·73	+ 0·15	*	*	*	*
	Loughborough	73	44	67·1	51·1	58·5	− 2·8	116	0	4	0·46	− 0·04	*	*	*	*
	Colly Weston (Stamford)	74	45	67·9	51·6	59·2	− 2·0	120	0	4	0·49	− 0·06	*	*	*	*
	Cheadle M	71	43	63·2	49·4	55·8	− 2·0	97	0	4	0·42	− 0·25	*	*	*	*
	Birmingham (Edgbaston)	71	47	64·4	51·5	57·5	− 2·2	109	0	3	0·27	− 0·33	19·7	—	18	—
	Churchstoke M	71	43	64·9	48·9	56·3	− 1·8	100	0	5	0·57	+ 0·03	23·1	− 19·2	21	− 17
	Hereford M	72	41	66·8	49·4	57·5	− 3·0	109	0	5	0·82	+ 0·32	*	*	*	*
	Cirencester	72	40	66·5	49·1	57·2	− 2·4	106	0	5	0·47	− 0·16	26·3	− 18·4	23	− 17
	Oxford	74	45	68·1	52·7	59·9	− 1·2	125	0	4	1·01	+ 0·46	21·9	− 23·5	20	− 21
5. ENGLAND, S	London	77	47	70·6	55·0	62·3	− 0·3	142	0	4	1·71	+ 1·20	27·2↓	− 14·9↓	25↓	− 13↓
	Swarraton (Alresford) M	71	42	66·6	51·0	58·3	− 1·0	114	0	2	0·58	+ 0·01	*	*	*	*
	Dungeness	73	46	67·6	54·7	60·7	− 0·4	131	0	3	0·16	− 0·20	49·3	—	44	—
	Hastings (St. Leonards)	75	49	66·8	55·2	60·6	− 0·3	130	0	3	0·12	− 0·37	49·2	− 3·4	44	− 3
	Southampton	73	49	69·5	55·2	61·9	− 0·3	139	0	4	0·25	− 0·31	42·6	− 6·9	38	− 6
	Portland Bill	72	50	65·4	54·6	59·6	+ 0·2	123	0	2	0·03	—	*	*	*	*
	Shaftesbury M	69	45	65·1	51·8	58·0	− 0·9	112	0	2	0·41	− 0·24	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	68	42	61·0	49·6	54·9	− 2·2	90	0	6	0·54	− 0·61	*	*	*	*
	Glasgow	62	44	59·3	49·4	54·0	− 3·5	84	0	5	1·77	+ 1·03	18·0	− 14·4	15	− 12
	Cally §	67	40	64·0	49·1	56·0	− 1·2	98	0	6	1·88	+ 1·01	*	*	*	*
	Aspatria	64	43	60·1	49·5	54·4	− 4·0	87	0	4	2·72	—	21·2	—	18	—
	Douglas (Isle of Man)	66	48	61·4	51·0	55·8	− 1·4	97	0	4	2·30	+ 1·64	31·4	− 13·6	27	− 12
7. ENGLAND, N.W	Newton Rigg	64	44	62·4	48·7	55·1	− 2·4	92	0	5	1·55	—	20·9	—	18	—
	Stonyhurst	66	49	61·8	52·5	56·8	− 1·6	104	0	6	1·39	+ 0·45	24·8	− 15·2	22	− 13
	Blackpool M	65	49	62·3	53·3	57·5	− 1·9	109	0	5	1·13	+ 0·47	35·5	− 5·8	31	− 5
	Manchester (Prestwich)	69	47	63·6	52·2	57·5	− 1·2	109	0	5	0·90	+ 0·10	25·9	—	23	—
	Liverpool Obsy. (Bidston)	68	52	62·6	53·7	57·8	− 2·0	111	0	4	0·53	− 0·09	28·2	—	25	—
	Chester (Hawarden Bridge)	69	51	63·1	54·3	58·4	− 1·6	115	0	4	1·44	—	*	*	*	*
	Llandudno M	68	51	63·6	54·7	58·8	− 1·2	118	0	6	0·80	+ 0·25	27·2	− 13·6	24	− 12
	Holyhead	66	51	60·4	52·7	56·3	− 2·4	100	0	5	1·47	+ 0·92	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	62	52	60·3	54·1	57·0	− 1·4	105	0	4	0·72	+ 0·18	32·1	− 14·5	29	− 13
	Clifton	71	48	67·2	54·2	60·3	− 0·5	128	0	5	0·25	− 0·41	*	*	*	*
	Bath	71	43	68·0	52·4	59·7	− 1·6	124	0	4	0·13	− 0·44	33·7	—	30	—
	Arlington (N. Devon)	70	41	64·6	49·9	56·7	− 1·9	103	0	3	1·08	+ 0·11	*	*	*	*
	Cullompton M	71	40	67·6	51·0	58·7	− 2·3	117	0	4	0·90	+ 0·26	27·2	− 15·1	25	− 14
	Falmouth	68	50	65·3	54·8	59·7	− 0·4	124	0	4	0·85	+ 0·18	42·1	− 9·2	38	− 8
	Plymouth	69	46	65·0	53·8	59·0	− 2·1	119	0	5	0·42	− 0·18	43·1	− 4·0	39	− 4
9. IRELAND, N.	Malin Head	59	49	57·3	51·6	54·3	− 2·6	86	0	6	1·31	+ 0·66	*	*	*	*
	Edenfel (Omagh)	70	44	63·4	50·4	56·5	− 0·2	102	0	5	1·79	+ 1·04	*	*	*	*
	Blacksod Point	64	50	61·6	54·0	57·5	− 0·3	109	0	5	1·47	+ 0·80	*	*	*	*
	Markree Castle	70	44	64·1	51·5	57·4	+ 0·6	108	0	5	1·58	+ 0·77	10·4	− 18·0	9	− 16
	Armagh	72	45	63·2	50·0	56·1	− 1·6	99	0	5	1·43	+ 0·73	12·3	− 19·8	11	− 17
	Donaghadee	63	46	58·3	50·6	54·2	− 3·1	85	0	7	1·68	+ 1·04	*	*	*	*
10. IRELAND, S.	Dublin	72	52	64·2	54·1	58·8	− 1·2	118	0	6	1·56	+ 0·99	15·7	− 22·1	14	− 19
	Birr Castle	68	45	65·6	50·6	57·6	− 0·8	109	0	6	1·92	+ 1·26	20·2	− 11·4	18	− 10
	Kilkenny	69	50	65·6	52·9	58·8	− 0·2	118	0	5	1·06	+ 0·48	*	*	*	*
	Waterford	68	50	64·7	52 9	58·4	− 1·3	115	0	6	1·63	+ 0·95	*	*	*	*
	Roche's Point	72	51	64·4	53·9	58·8	− 0·6	118	0	5	1·87	+ 1·20	*	*	*	*
	Valencia	67	51	63·6	53·9	58·4	− 0·1	115	0	6	2·04	+ 1·16	35·2	0·0	31	0
	Killarney	77	48	67·7	53·4	60·1	+ 1·9	127	0	4	1·45	+ 0·67	*	*	*	*
	Foynes	70	50	66·0	52·9	59·0	+ 1·3	119	0	6	2·55	+ 1·86	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	69	54	65·7	57·0	61·1	+ 0·8	134	0	3	0·69	+ 0·18	51·2	+ 1·7	47	+ 2
	Jersey	75	49	68·4	55·1	61·3	− 0·9	135	0	3	0·41	− 0·12	61·3	+ 6·2	56	+ 6

Stations Marked M are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

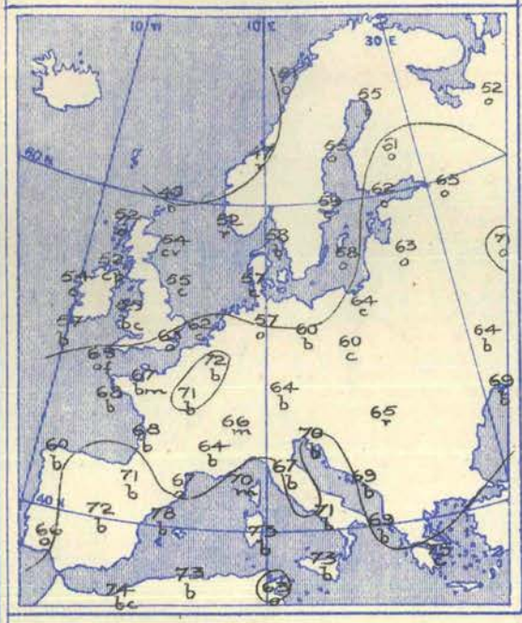
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

↓ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

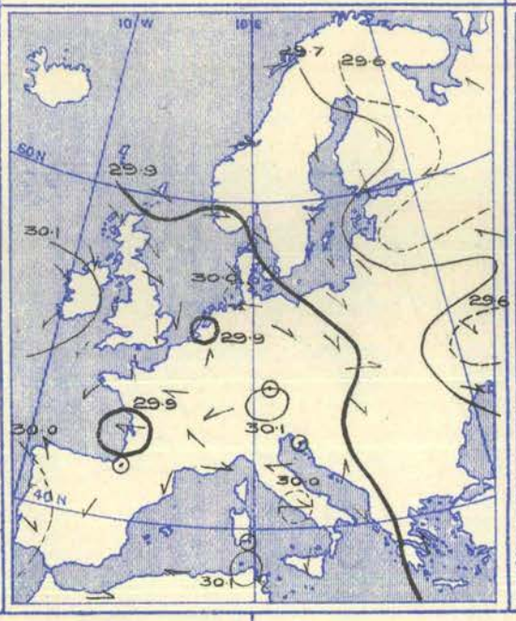
Note.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 12th July, 1903.

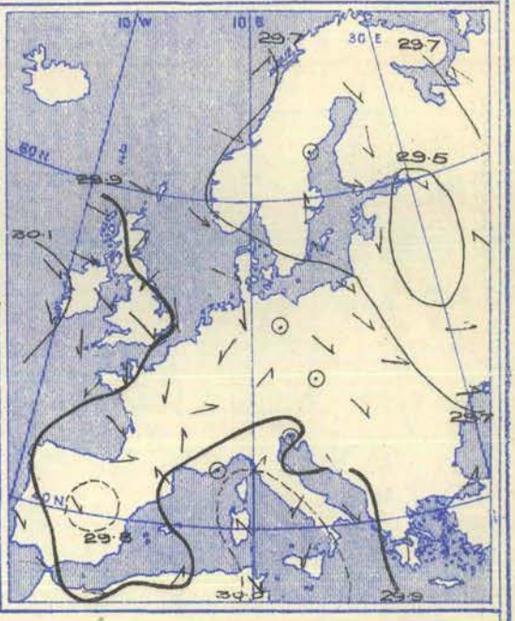
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull in most parts of our Islands, and the more northern and central parts of the Continent, with showers at Malin Head, and rain on the west coast of Norway, as well as at Buda Pesth. Slight rain later in several parts of this country, and heavier amounts in various parts of the Continent. Thunderstorms occurring at many French stations, and also at Moscow.

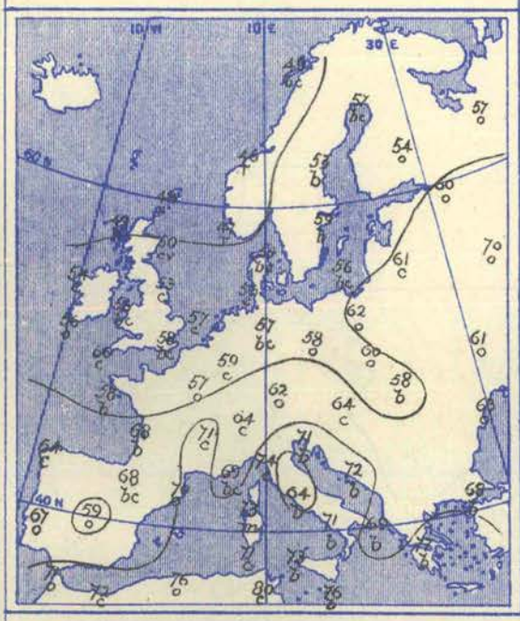
Temperature fallen in the United Kingdom and Portugal, but changed irregularly elsewhere. Morning readings highest, 78° at Barcelona, 75° at Athens, and above 70° in the south generally, as well as over central Russia and Belgium. Lowest, 47° at Christiansund, 49° at Sumburgh Head, 61° at Bodö, and 52° at Archangel and Stornoway. Below 60° over the whole of Scandinavia and the greater part of these Islands. Exceeding 70° on our extreme south coast later, and rising to between 80° and 90° over Germany, France, and southern Europe generally. Highest readings, 95° at Madrid, Bordeaux, and Oran, and 98° at Sanguinaires.

Wind at 8 a.m. light and irregularly cyclonic over our area as a whole, but light and anticyclonic over the United Kingdom. No important change later in day.

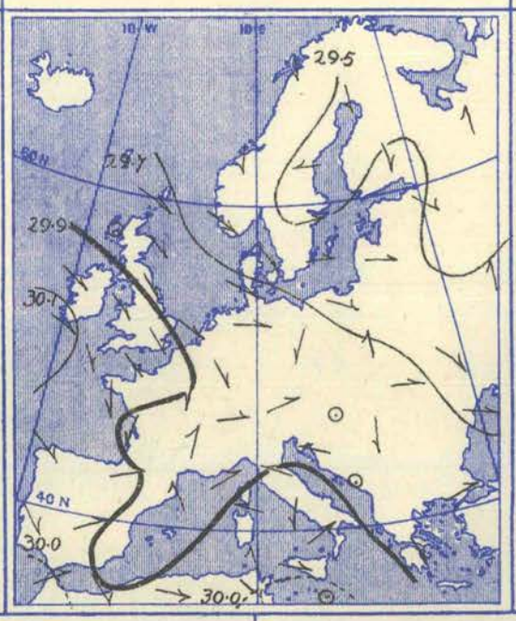
Barometer fallen very generally—most in the west and north-east, least in the south. Readings at 8 a.m. highest, 30·1 ins. and upwards, in an anticyclone of diminishing intensity over Ireland and the adjacent part of the Ocean. Lowest 29·6 ins. and less, (1) in an irregularly shaped system over northern Russia, and (2) in another system over Little Russia. Pressure decreasing slowly in nearly all regions during day, but general distribution continuing of an irregular type.

Monday, 13th July, 1903.

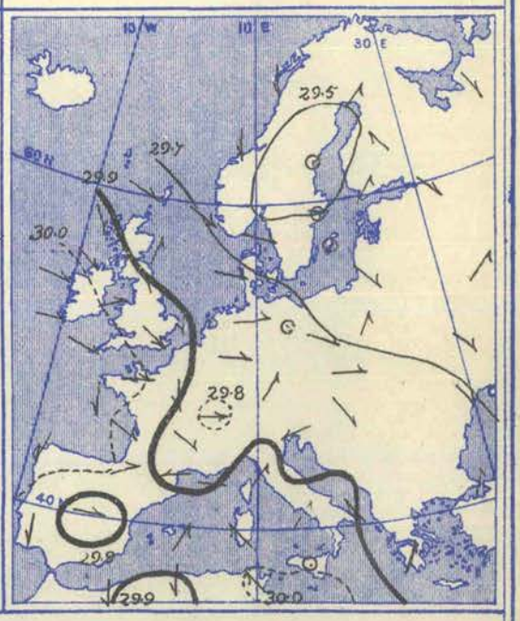
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in Italy and Greece and in a few scattered localities both in our Islands and the Continent, but overcast or cloudy as a whole, rainy at Leith and in the west of Norway, and thundery at Hernösand. Rain falling later in the west and north of the United Kingdom and over northern and central Europe, and thunderstorms occurring in the southern and central Departments of France. More than an inch of rain falling at Algiers.

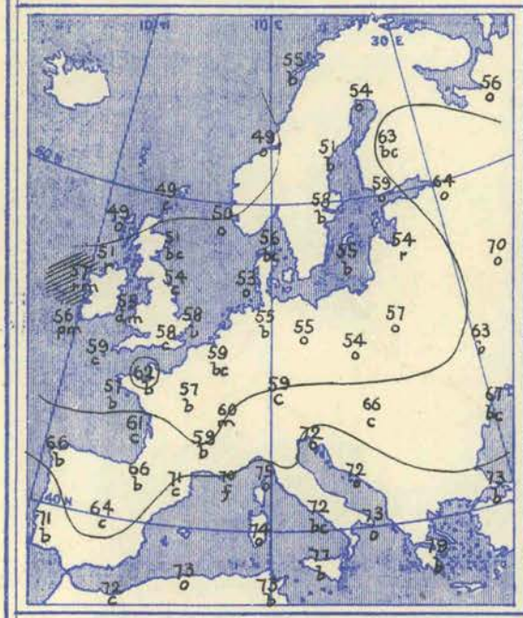
Temperature fallen in most places, but risen in Algeria, Greece, Italy, and the south of France. Morning readings ranging from 80° at La Calle, above 70° at many other southern stations, and from 70° at Moscow to below 60° over the whole of north-western Europe, and to below 50° on the west coast of Norway and in the Shetlands and Hebrides. Thermometer failing to exceed 67° all day in our Islands, but rising to 72° at St. Petersburg, nearly 80° at Moscow, and to above 80° in many southern regions. Highest reading of all, 93° at Tunis.

Wind in morning moderate or light from the North-Westward or the Northward in the Western countries, and light and variable elsewhere. No great change taking place as a whole during day, but a cyclonic circulation becoming more clearly marked over Scandinavia, and the North-Westerly wind showing a tendency to back in Ireland.

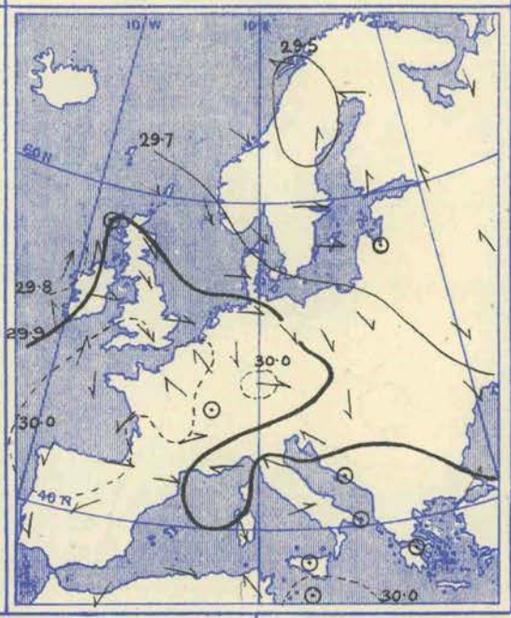
Barometer fallen except in the extreme south-east of Europe. Readings at 8 a.m. ranging from 30·1 ins. and upwards off the south-west of Ireland to 29·5 ins. and less over northern Russia and the greater part of Sweden. Gradients on the continent slight and very irregular. Pressure changing little and irregularly during day, and general distribution undergoing but little modification. Decreasing slowly in the extreme west of Ireland.

Tuesday, 14th July, 1903.

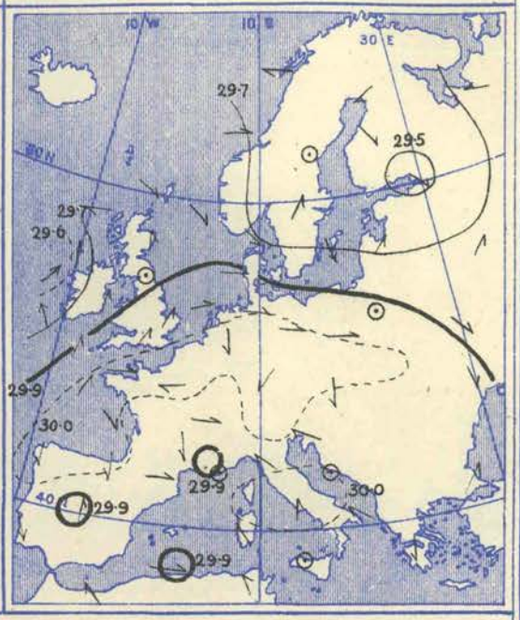
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over most parts of southern Europe, the east and south of our Islands, and Sweden; dull in several parts of Germany, northern Russia, and Finland, with rain at Riga and Uleaborg; dull and rainy over Ireland and Wales. More than one inch of rain falling during ensuing twenty-four hours at several Irish stations, and at Holyhead, and considerable falls over the north-east of England, the north of Russia, and at Turin. Smaller amounts experienced over Scotland and Scandinavia, and thunder heard at Jersey.

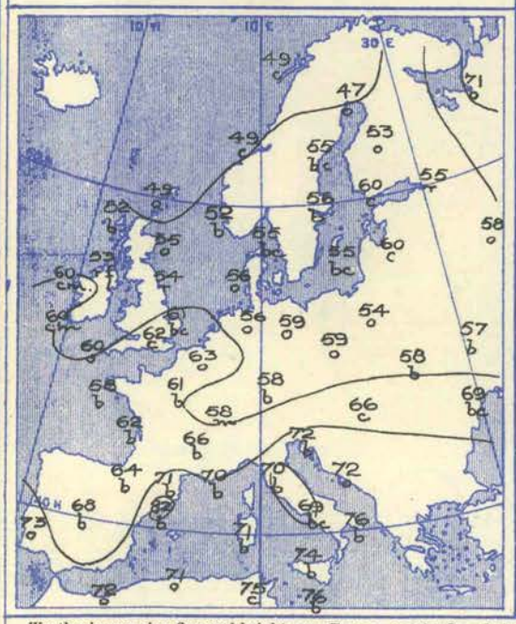
Temperature fallen as a whole. Morning readings ranging from 79° at Athens, and above 70° at nearly all stations on the shores of the Mediterranean, to less than 60° over the whole of north-western Europe, and to 49° at Christiansund, Sumburgh Head, and Stornoway. Rising later to 69° in London, 72° at St. Petersburg, to above 80° in the south of France, Spain, Italy, and the south generally, and to 95° at Sanguinaires and Tunis.

Wind at 8 a.m. showing an irregular cyclonic movement in the far north, and a general anticyclonic circulation over France, Germany, Spain, and England. Moderate to strong Southerly winds prevailing in the west of Ireland. Latter current subsequently spreading to England, and an Easterly breeze commencing in the north of Scotland. No important change on the Continent.

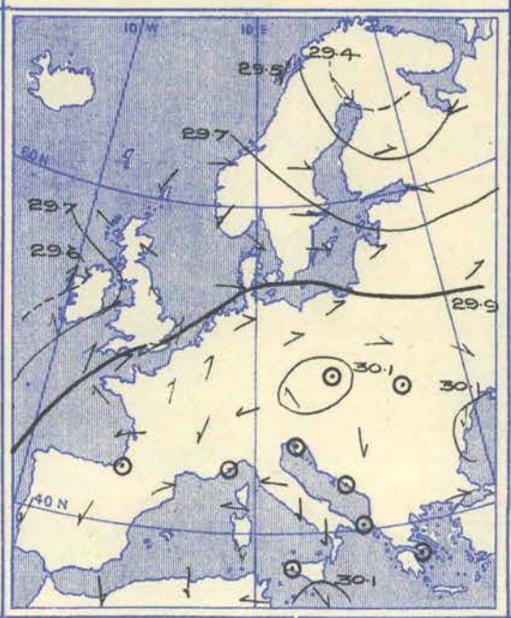
Barometer rising in nearly all regions, but falling decidedly in Ireland, and slowly in Lapland. Morning readings highest, 30·0 ins. and upwards, in an anticyclone over the Bay of Biscay, France, and the north of Spain; lowest, 29·5 ins. and less, in a depression over the north of Scandinavia. Below 29·8 ins. in another disturbance advancing towards Ireland. Anticyclone and Atlantic depression both moving eastwards later in the day. Changes on the Continent very irregular.

Wednesday, 15th July, 1903.

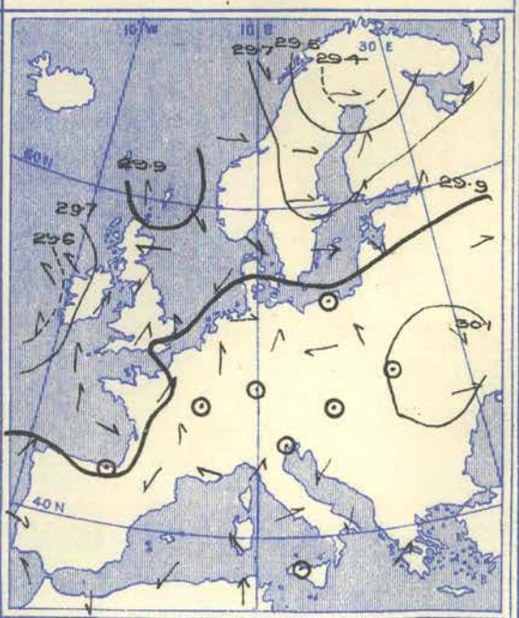
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over France, nearly the whole of southern and south-eastern Europe, and in several parts of Sweden, as well as in the south of England. Cloudy or dull elsewhere, with rain in Ireland, Wales, and the north-east of England, and also at St. Petersburg and Uleaborg. Heavy rain in Ireland and the west of England during day—1·12 ins. at Roche's Point, and smaller falls in Scotland, the north of England, Russia, Finland, and north Germany. Thunderstorms experienced in the west of France.

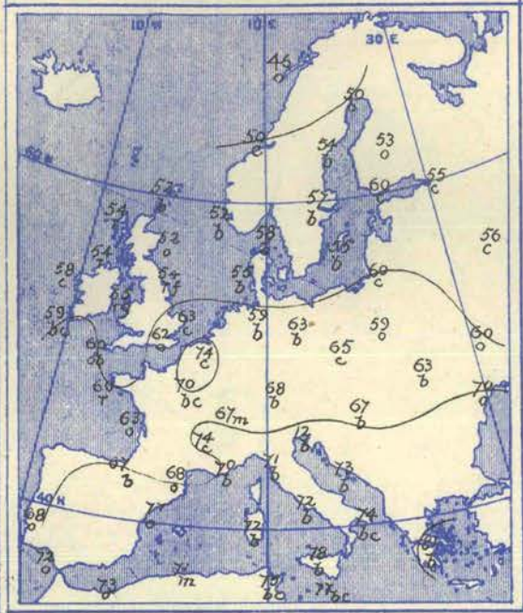
Temperature risen in most countries, but fallen over the greater part of Russia and Finland. Readings at 8 a.m. highest, 82° at Barcelona, 81° at Athens, and above 70° at Lisbon and on the shores of the Adriatic and Mediterranean. As high as 71° at Archangel. Lowest, 47° at Haparanda, 49° on the west coast of Norway and in the Shetlands, 53° at Malin Head, 54° at North Shields, and 56° at Prague. Rising subsequently to 106° at Tunis, to nearly 90° at several other southern stations, to between 75° and 85° over the southern half of England generally, and to 77° in London. Remaining below 60° on several parts of our north and north-east coasts.

Wind in morning Southerly to South-Westerly over the Southern half of our Islands, and South-Easterly to Easterly over Scotland and the North of Ireland; strong at Malin Head, but moderate or light generally. Another partial cyclonic circulation of moderate or fresh winds prevailing over the North of Europe. Light anticyclonic airs or calms in all the Central and Southern regions. No decided change later.

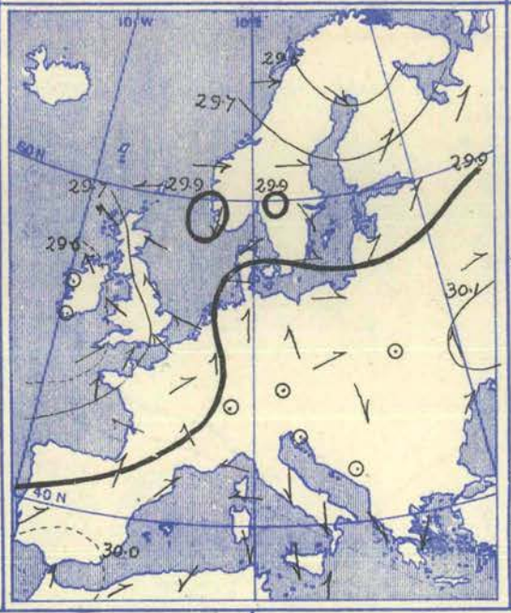
Barometer at 8 a.m. ranging from 30·0 ins. to 30·1 ins. in a large anticyclone covering most of the Mediterranean and the southern half of Europe, to 29·6 ins. and less in a depression having its centre off the north-west of Ireland, and to below 29·4 ins. in a system over Lapland. Western disturbance extending slowly eastwards over the United Kingdom and France during day, and the anticyclone drifting eastwards. Local minima forming over France and England.

Thursday, 16th July, 1903.

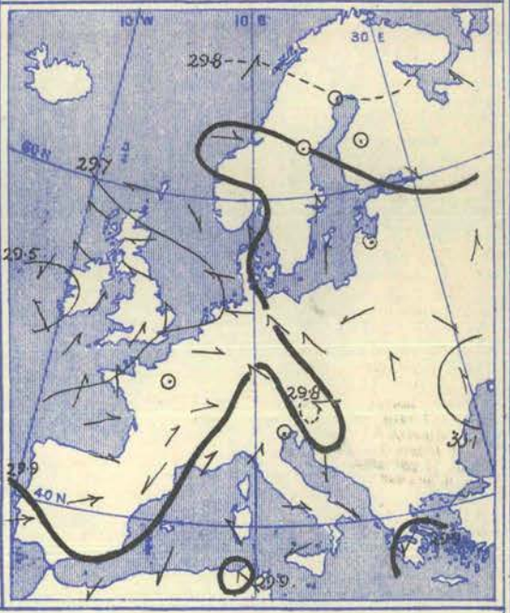
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy our dull over our Islands and along the continental seaboard of the Atlantic with rain in most of our own districts, and at Oporto, and rain and thunder in the west of France. Fine and bright in most other regions, but a good deal of cloud prevailing in Finland and the north of Russia. Heavy rain later in almost all parts of western and north-western Europe. Heaviest amounts 2·6 ins. at Frankfurt, and more than an inch in the East of Scotland and at La Rochelle. Thunder heard in the south of Ireland.

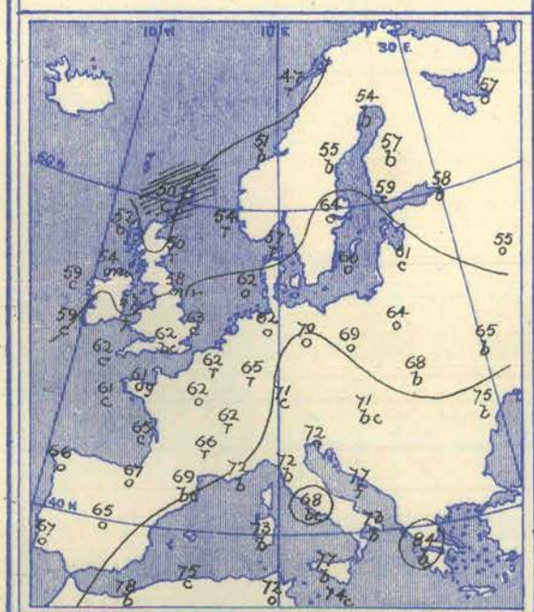
Temperature risen generally, but changed very little over the United Kingdom. Readings at 8 a.m. highest, (1) 81° at Athens, and only a few degrees lower at many other southern stations, (2) 74° at Brussels, and 70° at Cape Grisnez and Paris. Lowest, 46° at Bodö, 50° at Christiansund, 51° at Wick, and 54° at Shields and Malin Head. Rising later to 99° at Sanguinaries, 95° at Patras, and to 80° or several degrees above over the southern regions generally, and also in some parts of Germany. Maxima in our Islands all below 70°, and below 60° in Scotland and the north-east of England.

Wind in morning light to moderate or fresh from South-East over our Islands and the Netherlands. Strong from West in the west of Norway, light from the same quarter over the Gulf of Bothnia, and from South-West over northern Russia. Light variable airs or calms prevalent over the central and Mediterranean regions. Veering to the South-Westwards over the south of England during day. Not much change as a whole elsewhere, but the strong Westerly current subsiding in Norway.

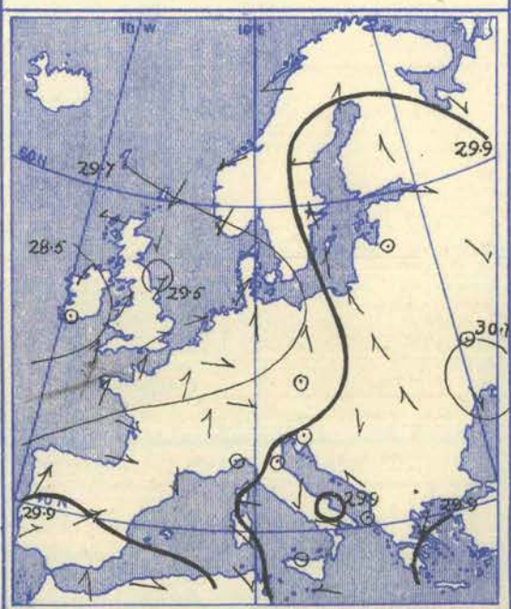
Barometer fallen slightly generally, but risen over the major portion of Russia and in Scandinavia. Morning readings ranging from 30·1 ins. to 30·6 ins. over the south-eastern half of Europe to below 29·6 ins. in a depression extending from the Atlantic over Ireland, and to less than 29·5 ins. in a disturbance over Lapland. Latter system dispersing or moving away northwards by evening, and that in the west continuing to spread slowly eastwards. A local minimum forming over central Spain, and another one near Vienna.

Friday, 17th July, 1903

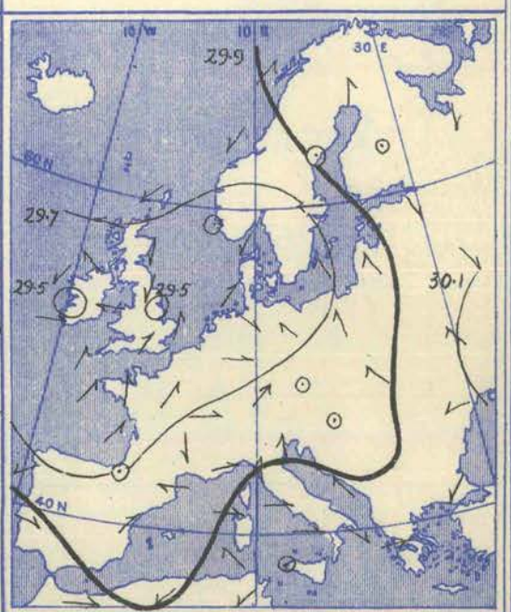
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the south-eastern half of England, and in most parts of south-eastern Europe, as well as in Sweden. Overcast skies and rain general in most other regions, and fog prevailing in the Irish Sea and at Portland Bill. Foggy also at Cape Sicié, Sanguinaires, and Lesina. Rain later throughout the northern half of Europe, and thunderstorms in several places. Rain heavy in many places. As much as 2·6 ins. at Hamburg, 2·1 ins. at Frankfurt, and 1·5 ins. at Copenhagen and in London. The last amount falling between 3 and 8 a.m. during a thunderstorm.

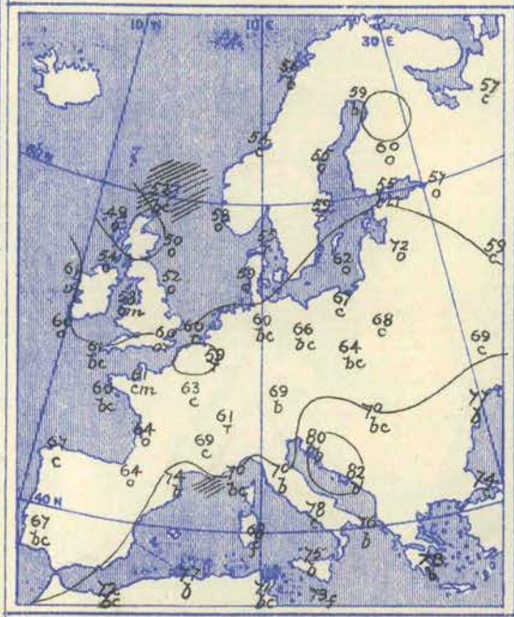
Temperature risen over central Europe, but changed irregularly generally. Readings at 8 a.m., highest, 84° at Patras, above 70° at nearly all Adriatric and Mediterranean stations, and also in the south of Russia and in parts of Austria. Lowest, 47° at Bodö, 49° or 50° in the north of Scotland, and 55° at Donaghadee and St. Petersburg. Rising later to 74° in London, and to above 80° in the southern regions. Highest value, 95° at Tunis.

Wind at 8 a.m. showing nearly a complete cyclonic circulation around our Islands, but force only light or moderate. Light and variable airs prevalent over the Mediterranean, and light anticyclonic airs over the eastern part of our area. No great change later, but cyclonic movement extending slowly eastwards.

Barometer fallen except over the east and north of Scandinavia, Finland, and the extreme south of Russia. Morning readings ranging from 30·0 ins. to 30·1 ins. in an anticyclone over Russia to below 29·6 ins. in a shallow area embracing our Islands and most of the North Sea, and to below 29·5 ins. in a small minimum over and to the northward of Northumberland, and in a larger one over Ireland. A rather deep depression forming over the Baltic later, and barometer in that region falling quickly. No other important change.

Saturday, 18th July, 1903.

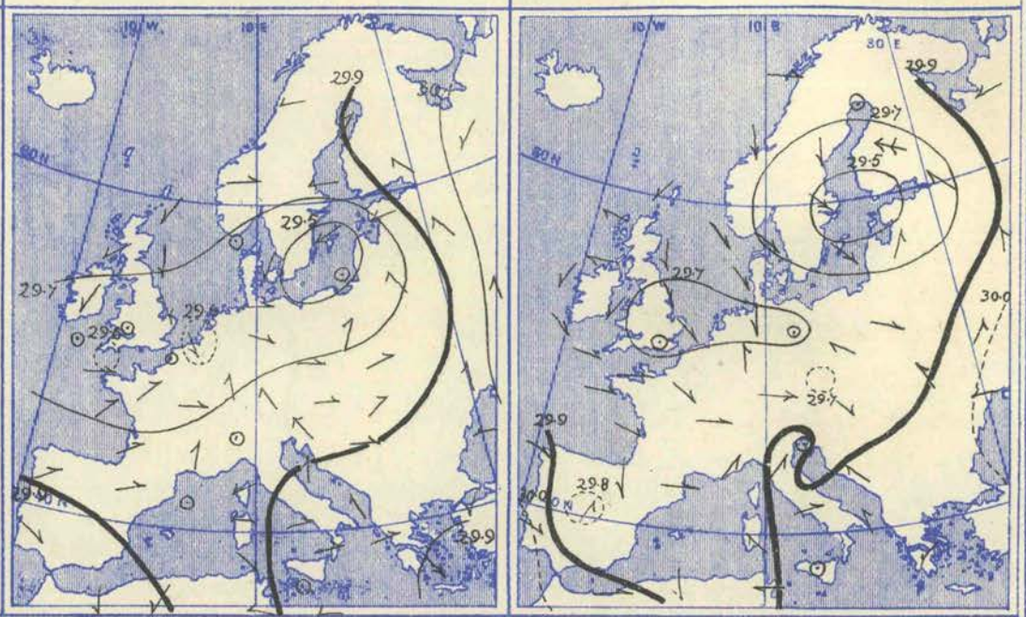
Temperature and Weather. 8 a.m.



Weather in morning fine and bright in many parts of southern Europe and the Mediterranean regions, but very cloudy or dull as a whole, with rain in various parts of the United Kingdom, at Belfort, the Scaw, and on the shores of the Baltic. A thunderstorm prevailing at Helsingfors, and thunder only at Lorient. Thunderstorms during day over the southern counties—about 0·7 in. of rain at Westminster and Oxford—and also in several parts of France. More than 2 ins. of rain at Helsingfors and 1 in. at Stockholm.

Temperature continuing very low over Scotland, and the north of England and Ireland. Morning readings ranging from 50°, 49° in north Britain, and 55° over the Gulf of Finland, to between 64° and about 70° over all the central districts of Europe, to 77° at Odessa, 78° at Athens and Naples, 82° at Lesina, and to 90° at Aumale. Maximum at North Shields only 54°, but thermometer just touching or exceeding 70° in the south of England, exceeding 80° at nearly all southern stations, and 90° in the south of Austria, at Brindisi, and in Algeria.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind in morning showing a complete cyclonic circulation of strong winds around the south of Sweden and its vicinity. Moderate from the Eastward or North-Eastward in Scotland and Ireland, and light from the South-Westward or Westward in Spain, France, and the central countries. Some local cyclonic movements prevailing over England. Light and variable over the most southern regions generally, but very strong from North-North-West at Athens. Wind increasing to a gale from East-South-East at Kuopio by evening. No other change of importance.

Barometer at 8 a.m. ranging from 30·17 ins. over northern and central Russia, 30·02 ins. at Malta, and 29·98 ins. at Lisbon, to a little above 29·6 ins. in a shallow area, with local minima, over Ireland, England, the north of France, and the North Sea, and to about 29·4 ins. in the centre of a newly formed depression over the south of Sweden and the Baltic. Another disturbance (29·8 ins. and less) over the Grecian Archepelago. Swedish depression moving north-north-eastwards later, and the shallow area over our Islands travelling slowly eastwards and dispersing gradually.

IV.—GENERAL NOTES, etc.

During this period an anticyclone of considerable size but of little intensity travelled south-eastwards and eastwards from the Atlantic and Ireland to France and central Europe, and finally to southern Russia, while pressure gave way over the northern regions, where depressions were shown throughout the greater part of the week, and decreased very gradually over our Islands and all the neighbouring parts of the Continent, as a shallow disturbance, which subsequently became complex, arrived from the westward and eventually embraced all those regions. Under the influence of these disturbances, the weather became very unsettled and rainy over the whole of the northern half of Europe, and very heavy falls of rain were experienced over the north and west of our Islands, and at many stations on the Continent—particularly in the west of Germany, and finally in London Temperature was not high in any of the northern countries for the time of year, and over our own northern districts it was generally very low. In the southern and Mediterranean regions, the weather was almost continuously fine and the temperature high. Thunderstorms—mostly at the end of the period—were observed in different parts of the United Kingdom and France. At the close of the week a rather deep impression that had formed over the Baltic and the south of Sweden was travelling away north-eastwards. The cyclonic circulation of wind around this system was fresh or strong in force, but during the greater part of the period the winds had very little strength, and were frequently from rather variable directions.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 164.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	58·7	+26·4	48	+ 22
STRATHPEFFER SPA	39·5	+10·5	33	+ 9
EDINBURGH	18·5	-14·1	16	- 12
COCKLE PARK	16·9	—	15	—
NEWCASTLE-ON-TYNE	15·0	—	13	—
YORK	16·2	-23·2	14	- 20
CROMER	26·8	—	24	—
LOWESTOFT	24·2	—	21	—
DUNMOW	27·4	—	25	—
SHEFFIELD	19·3	—	17	—
WORKSOP	17·1	-20·3	15	- 18
THURCASTON	26·1	-14·0	23	- 12
TUNBRIDGE WELLS	45·0	—	41	—
MARGATE	32·6	-12·9	29	- 12
BROADSTAIRS	39·7	—	36	—
RAMSGATE	—	—	—	—
EASTBOURNE	53·5	+ 0·9	48	+ 1
BRIGHTON	56·9	+ 4·7	51	+ 4
WORTHING	59·1	—	53	—
BOGNOR	52·1†	—	47†	—
WATERGATE PARK	35·9	—	32	—
WESTBOURNE	41·9†	- 8·8	38†	- 8
VENTNOR HOSPITAL	46·2	- 2·1	42	- 2
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	25·6	-16·8	23	- 15
SOUTHPORT	34·6	—	30	—
RHYL	36·5	—	32	—
ABERDOVEY	30·6†	—	27†	—
TENBY				
TORQUAY	50·1	+ 0·6	46	+ 1
NEWQUAY	48·6	+ 0·2	44	0
GUERNSEY	58·5†	+ 1·4	54†	+ 1

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending June 27th, 1903.	Newquay	—	—	—	—	—	—	—	—	—	—	—	37·1	-14·9	33	- 13
,, ,, July 4th, ,,	Ochertyre	73	48	66·1	50·1	57·5	+ 0·4	109	0	4	1·14	+ 0·45	—	—	—	—
,, ,, ,, ,,	Lowestoft	—	—	—	—	—	—	—	—	—	—	—	85·2	—	74	—
,, ,, ,, ,,	Hollesley Bay	—	—	—	—	—	—	—	—	—	—	—	84·2	—	73	—
,, ,, ,, ,,	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	81·2	—	71	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 29.] *Third Series.* WEEK ENDING SATURDAY, JULY 25TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 170.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	75	39	62·4	45·3	53·3	2 below	79	–	0	0	956	– 73	491	– 47
	1. SCOTLAND, EAST	75	35	65·0	47·2	55·5	2 below	95	– 9	0	0	1136	–121	502	– 81
	2. ENGLAND, N.E.	73	37	65·4	50·4	57·4	2 below	108	– 8	0	0	1312	– 12	342	–137
	3. ENGLAND, EAST	75	40	67·6	52·1	59·3	2 below	121	– 7	0	0	1591	+ 14	322	–203
	4. MIDLAND COUNTIES	75	41	67·4	51·2	58·7	1 below	117	7	0	0	1507	– 90	355	–180
	5. ENGLAND, SOUTH	74	42	67·3	54·4	60·4	1 below	129	– 7	0	0	1685	– 38	208	–179
Principal Grazing Districts.	6. SCOTLAND, WEST	71	42	65·0	48·9	56·4	1 below	101	– 5	0	0	1298	– 45	317	– 96
	7. ENGLAND, N.W.	71	40	65·5	52·1	58·3	1 below	114	–	0	0	1436	– 12	259	–129
	8. ENGLAND, S.W.	72	45	65·9	54·0	59·5	1 below	123	0	0	0	1657	+ 32	162	–138
	9. IRELAND, NORTH	69	41	63·6	50·2	56·4	1 below	101	– 7	0	0	1341	– 96	286	– 61
	10. IRELAND, SOUTH	73	44	66·1	52·7	58·9	0 (average)	118	0	0	0	1662	+ 7	183	– 67
	— CHANNEL ISLANDS	69	52	66·3	57·4	61·5	0 (average)	137	+ 1	0	0	1908	+ 63	49	– 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 170.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	6	3 less	138	+18	36·9	+12·8	50	+22	42	+19	664	– 84	25	– 3
	1. SCOTLAND, EAST	3	5	2 less	118	+14	20·8	+ 5·4	38	+ 2	33	+ 2	716	–116	27	– 4
	2. ENGLAND, N.E.	4	7	1 more	98	+ 2	13·7	+ 1·3	35	– 6	31	– 5	788	– 82	29	– 3
	3. ENGLAND, EAST	5	20	14 more	88	– 9	14·8	+ 2·8	29	–20	26	–18	924	– 63	35	– 2
	4. MIDLAND COUNTIES	4	11	5 more	96	+ 3	17·0	+ 3·0	28	–16	26	–14	794	– 55	30	– 2
	5. ENGLAND, SOUTH	5	17	12 more	98	+ 7	17·4	+ 2·8	34	–14	32	–12	988	– 4	37	0
Principal Grazing Districts.	6. SCOTLAND, WEST	3	4	5 less	127	+20	33·4	+ 9·1	47	+10	41	+ 9	796	– 82	30	– 3
	7. ENGLAND, N.W.	3	9	2 more	115	+15	20·4	+ 4·2	42	+ 3	38	+ 3	879	+ 10	33	0
	8. ENGLAND, S.W.	5	15	8 more	111	+ 9	23·2	+ 4·4	43	– 2	39	– 2	947	– 86	36	– 3
	9. IRELAND, NORTH	6	11	4 more	139	+17	23·2	+ 5·6	44	+14	39	+12	702	–115	26	– 4
	10. IRELAND, SOUTH	5	10	3 more	126	+16	25·9	+ 5·6	41	+ 7	37	+ 6	792	–125	30	– 5
	— CHANNEL ISLANDS	5	14	9 more	118	+13	16·8	+ 1·4	45	– 9	42	– 8	1130	– 44	43	– 2

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was at first fair and dry in most districts, but afterwards became wet and unsettled, with thunderstorms, or thunder only, in several isolated parts of the United Kingdom. Very heavy rain fell in the east and south-east of England on Thursday night, and considerable quantities in some parts of our southern counties on Saturday.

Temperature was slightly below the mean in all districts excepting Ireland S., and the Channel Islands. The highest readings, which occurred at times varying greatly in different places, ranged from 75° in several parts of the Wheat producing districts to 69° in Ireland N., and the Channel Islands. The lowest readings also varied, not only as regards the time of their occurrence, but also with respect to the readings actually recorded, the absolute minima at some stations being as many as 10° or 12° lower than at other stations in the same district. The readings shown in the table, which were nearly all recorded at inland places, ranged from 35° in Scotland E., and 37° in England N.E., to 45° in England S.W., and 52° in the Channel Islands.

Rainfall was less than the mean in Scotland, but greatly in excess of the normal over England and Ireland. In England S.W. and the Channel Islands the fall was more than twice, while in England E. and S. it was more than three times the average. The amount collected on Friday morning was as much as 2·3 ins. at Cambridge, 2·0 ins. at Shoeburyness, and 1·9 ins. at Hastings. At the Royal Observatory, Greenwich, 3·2 ins. were measured on the same day, while at stations in and around West Ham the amount varied between 3·2 ins. and 4·0 ins. (the records from these places were not used in the preparation of the above Summary).

Bright Sunshine was in excess of the mean over Ireland, Scotland and the north-west of England, but showed a considerable deficiency over the eastern, midland and southern counties. The percentage of the possible duration ranged from 42 in Scotland N. and the Channel Islands, and 41 in Scotland W., to only 26 in England E. and the Midland Counties.

Barometer and Wind.—Shortly after the commencement of the week an anticyclone of very moderate intensity advanced over our Islands from the Atlantic, and light, varying breezes from some Northern quarter were experienced generally. The anticyclone soon passed away, however, to the eastward, and for the next two or three days cyclonic systems travelled northwards outside our western coasts, while small secondary depressions advanced more directly over the Kingdom, the prevailing winds being therefore from S. or S.W. On Thursday a very clearly defined secondary, which appears to have been formed originally over the Bay of Biscay, moved north-eastwards over France, our south-eastern counties and the North Sea; and in its rear the wind shifted temporarily to the West or North-west over the whole of England. On Saturday, however, a new and rather deep disturbance passed northward along our western coasts, while shallow secondary systems advanced north-eastwards across England, the wind during these movements backing temporarily to S. or S.E., but afterwards veering to S.W., again, as the depressions moved northwards.

207 | 70 Wy. & S. Ltd
319 | 90 12 | 02

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	55	43	53·9	45·9	49·6	− 3·2	53	0	4	0·60	+ 0·04	*	*	*	*
	Stornoway	69	41	62·9	45·1	53·4	− 1·1	80	0	4	0·61	− 0·08	60·5	+ 29·3	51	+ 25
	Wick	65	43	59·3	46·6	52·5	− 2·7	74	0	3	0·21	− 0·36	*	*	*	*
	Lairg Ⓢ	75	39	66·6	43·4	54·2	− 0·6	85	0	5	0·81	+ 0·14	*	*	*	*
	Glencarron Ⓢ	71	41	64·0	44·4	53·5	− 1·4	81	0	2	0·35	− 1·05	*	*	*	*
	Fort Augustus Ⓢ	72	40	65·3	44·7	54·3	− 2·4	86	0	3	0·52	− 0·21	49·4	+ 28·3	42	+ 24
	Fort William	71	42	65·0	47·2	55·5	− 1·3	95	0	4	0·75	− 0·45	63·4	+ 35·8	55	+ 31
1. SCOTLAND E.	Nairn	72	40	64·9	45·0	54·3	− 2·8	86	0	4	0·46	− 0·16	*	*	*	*
	Aberdeen	65	44	60·0	48·0	53·6	− 3·4	81	0	2	0·42	− 0·23	28·6	− 8·4	24	− 7
	Braemar Ⓢ	66	35	63·5	43·9	52·0	− 1·2	77	0	5	0·51	− 0·16	*	*	*	*
	Ochtertyre Ⓢ	75	44	68·7	48·1	57·7	− 0·5	110	0	4	1·01	+ 0·28	*	*	*	*
	Leith Ⓢ	75	45	68·1	50·0	58·4	− 0·3	115	0	3	0·28	− 0·34	*	*	*	*
	Marchmont Ⓢ	69	44	64·7	48·0	55·8	− 1·0	97	0	2	0·41	− 0·36	40·8	+ 2·7	35	+ 3
2. ENGLAND, N.E.	Alnwick Castle	70	37	65·1	47·3	55·6	− 1·9	95	0	3	0·67	+ 0·03	*	*	*	*
	Durham	68	41	64·8	48·3	56·0	− 3·1	98	0	3	0·94	+ 0·31	37·2	− 0·1	33	0
	Shields	70	43	63·7	50·6	56·7	− 1·4	103	0	4	0·49	− 0·09	*	*	*	*
	Scarborough Ⓜ	72	48	64·0	50·4	56·7	− 2·6	103	0	3	0·45	− 0·15	34·7	—	31	—
	Spurn Head	73	52	66·1	54·4	59·8	− 0·1	125	0	5	0·77	+ 0·40	*	*	*	*
	Fulbeck (Lincolnshire)	73	47	68·6	51·4	59·4	− 0·9	122	0	4	0·87	+ 0·34	34·8	—	31	—
3. ENGLAND E.	Hillington Ⓜ	75	41	69·4	49·6	58·8	− 2·1	118	0	5	1·39	+ 0·75	29·4	− 14·6	27	− 13
	Yarmouth	71	45	65·3	52·1	58·2	− 2·3	113	0	5	0·82	+ 0·22	*	*	*	*
	Geldeston	73	40	68·2	51·0	59·0	− 1·7	119	0	4	1·46	+ 0·91	30·2	− 16·6	27	− 15
	Cambridge	73	42	68·9	50·9	59·3	− 1·5	121	0	5	3·24	+ 2·70	20·8	− 24·9	19	− 23
	Felixstowe	73	46	66·9	54·2	60·1	− 1·0	127	0	6	2·48	—	37·4†	—	34†	—
	Rothamsted	70	43	66·5	51·4	58·4	− 2·1	115	0	5	2·06	+ 1·49	24·8	− 22·4	23	− 20
	Shoeburyness	72	49	68·1	55·6	61·4	0·0	136	0	6	2·45	+ 2·05	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	68	46	65·6	50·2	57·4	− 0·7	108	0	4	0·94	+ 0·32	42·0	—	38	—
	Bawtry (Hesley Hall)	75	44	69·4	51·3	59·7	− 0·9	124	0	3	0·74	+ 0·17	*	*	*	*
	Loughborough	73	45	69·3	51·7	59.9	− 1·5	125	0	5	0·69	+ 0·18	*	*	*	*
	Colly Weston (Stamford)	73	46	69·1	50·7	59·3	− 2·1	121	0	4	0·86	+ 0·31	*	*	*	*
	Cheadle Ⓜ	69	47	65·7	50·8	57·7	− 0·4	110	0	4	0·91	+ 0·23	*	*	*	*
	Birmingham (Edgbaston)	71	49	66·2	52·6	58·9	− 0·9	118	0	5	1·28	+ 0·68	24·5	—	22	—
	Churchstoke Ⓜ															
	Hereford Ⓜ	71	44	66·9	50·6	58·2	− 2·5	113	0	4	1·00	+ 0·49	*	*	*	*
	Cirencester	69	41	66·7	49·9	57·7	− 1·9	110	0	5	1·76	+ 1·11	24·3	− 19·9	22	− 18
	Oxford	70	49	67·4	53·3	59·9	− 1·3	125	0	6	1·61	+ 1·06	20·6	− 24·3	19	− 22
5. ENGLAND	London	73	48	69·9	54·0	61·4	− 1·4	136	0	4	2·48	+ 1·96	26·7‡	− 15·0‡	24‡	− 14‡
	Swarraton (Alresford) Ⓜ	71	42	67·4	49·7	57·9	− 1·8	111	0	6	1·60	+ 1·02	*	*	*	*
	Dungeness	69	54	67·4	56·7	61·7	+ 0·2	138	0	6	1·47	+ 1·10	36·0	—	33	—
	Hastings (St. Leonards)	69	52	65·8	55·4	60·2	− 0·9	127	0	5	2·79	+ 2·29	37·3	− 14·4	34	− 13
	Southampton	74	49	70·4	53·5	61·4	− 0·9	136	0	5	1·29	+ 0·72	35·5	− 13·7	33	− 13
	Portland Bill	65	55	64·4	56·4	60·1	+ 0·3	127	0	4	1·07	—	*	*	*	*
	Shaftesbury Ⓜ	69	51	65·8	55·1	60·1	+ 0·7	127	0	5	1·05	+ 0·40	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	70	43	66·8	48·1	56·8	− 0·5	104	0	5	0·73	− 0·45	*	*	*	*
	Glasgow	69	45	65·3	50·7	57·5	0·0	109	0	3	0·33	− 0·44	50·5	+ 18·8	44	+ 16
	Cally Ⓢ	71	44	67·0	47·4	56·5	− 0·8	102	0	3	0·51	− 0·39	*	*	*	*
	Aspatria	70	42	64·0	49·1	56·0	− 2·1	98	0	2	0·11	—	44·8	—	40	—
	Douglas (Isle of Man)	65	44	61·8	49·2	55·1	− 2·2	92	0	4	0·51	− 0·19	45·5	+ 1·7	40	+ 2
7. ENGLAND, N.W	Newton Rigg	69	40	65·4	47·1	55·6	− 2·2	95	0	3	0·20	—	39·8	—	35	—
	Stonyhurst	68	48	65·2	51·9	58·1	− 0·3	113	0	2	0·80	− 0·17	43·1	+ 4·1	39	+ 4
	Blackpool Ⓜ	69	49	64·7	51·8	57·8	− 1·9	111	0	3	0·67	− 0·01	44·0	+ 3·8	39	+ 3
	Manchester (Prestwich)	71	46	67·7	51·1	58·8	0·0	118	0	3	1·38	+ 0·57	38·1	—	34	—
	Liverpool Obsy. (Bidston)	69	51	65·3	53·4	58·9	− 1·1	118	0	4	1·14	+ 0·50				
	Chester (Hawarden Bridge)	71	52	67·6	53·2	59·9	− 0·2	125	0	4	1·05	—	*	*	*	*
	Llandudno Ⓜ	68	52	65·3	54·3	59·4	− 0·9	122	0	5	1·01	+ 0·44	41·0	+ 0·9	37	+ 1
	Holyhead	66	53	62·4	53·7	57·8	− 1·1	111	0	2	0·69	+ 0·13	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	62	52	61·4	55·7	58·4	− 0·3	115	0	5	1·31	+ 0·75	49·3	+ 3·6	45	+ 3
	Clifton	70	52	67·4	55·8	61·2	+ 0·3	134	0	2	0·62	− 0·06	*	*	*	*
	Bath	71	45	67·7	52·7	59·7	− 2·0	124	0	4	1·84	+ 1·26	36·2	—	33	—
	Arlington (N. Devon)	66	48	64·4	51·0	57·2	− 1·7	106	0	4	1·61	+ 0·61	*	*	*	*
	Cullompton Ⓜ	72	45	68·6	51·7	59·6	− 1·5	123	0	4	0·98	+ 0·34	37·2	− 4·7	34	− 4
	Falmouth	69	54	66·0	55·3	60·3	0·0	128	0	7	1·90	+ 1·20	44·9	− 5·7	41	− 5
	Plymouth	69	53	65·5	55·6	60·2	− 1·1	127	0	6	1·90	+ 1·28	36·2	− 10·4	33	− 10
9. IRELAND, N.	Malin Head	66	50	63·6	51·9	57·3	− 0·1	107	0	5	0·62	− 0·05	*	*	*	*
	Edenfel (Omagh)	68	44	63·7	48·0	55·3	− 1·4	93	0	7	1·32	+ 0·55	*	*	*	*
	Blacksod Point	63	52	62·3	53·9	57·8	− 0·2	111	0	6	1·10	+ 0·37	*	*	*	*
	Markree Castle	69	41	65·0	47·0	55·4	− 1·5	94	0	6	1·60	+ 0·77	36·2	+ 7·7	32	+ 7
	Armagh	67	47	64·6	50·8	57·2	− 0·6	106	0	5	1·08	+ 0·35	51·6	+ 20·6	46	+ 18
	Donaghadee	68	47	62·3	49·6	55·5	− 1·9	95	0	6	1·13	+ 0·48	*	*	*	*
10. IRELAND, S.	Dublin	71	50	66·9	53·2	59·6	− 0·5	123	0	6	1·32	+ 0·72	44·6	+ 7·3	40	+ 7
	Birr Castle	68	47	67·1	51·1	58·5	− 0·1	116	0	5	1·16	+ 0·48	36·8	+ 5·7	33	+ 5
	Kilkenny	68	44	66·1	50·9	58·0	− 1·1	112	0	5	1·73	+ 1·12	*	*	*	*
	Waterford	68	47	66·3	52·1	58·7	− 0·9	117	0	5	0·99	+ 0·25	*	*	*	*
	Roche's Point	67	48	64·7	53·9	58·9	− 0·8	118	0	6	0·95	+ 0·26	*	*	*	*
	Valencia	65	49	63·6	54·6	58·8	+ 0·1	118	0	6	0·63	− 0·30	42·2	+ 7·8	38	+ 7
	Killarney	73	48	67·9	53·1	60·0	+ 1·4	126	0	5	0·79	− 0·04	*	*	*	*
	Foynes	68	47	66·2	52·6	58·9	+ 0·9	118	0	4	0·73	− 0·01	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	68	57	66·6	57·7	61·8	+ 1·2	139	0	6	1·59	+ 1·06	51·6	+ 2·0	48	+ 2
	Jersey	69	52	66·0	57·1	61·2	− 1·5	134	0	4	1·20	+ 0·66	42·7	− 12·4	40	− 12

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

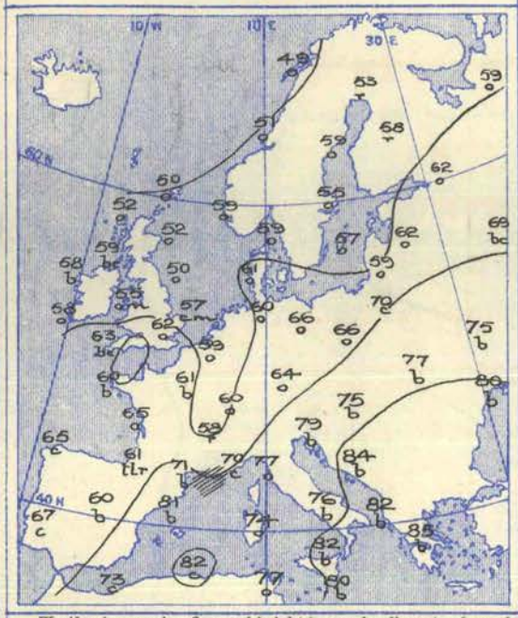
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 19th July, 1903.

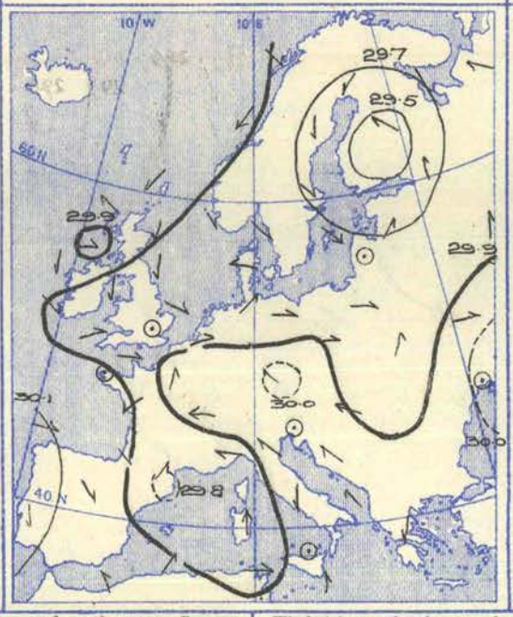
Temperature and Weather. 8 a.m.

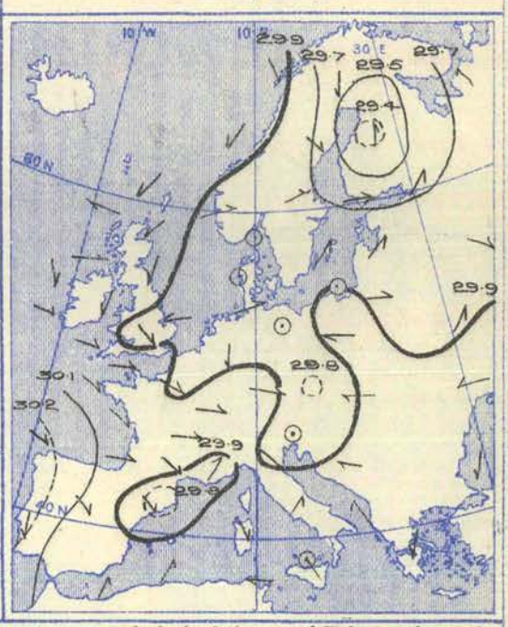


Weather in morning fine and bright in nearly all parts of southern and south-eastern Europe, but a thunderstorm prevailing at Biarritz, and rain at Lyons. Dull and unsettled over the more northern regions, with rain at Oxford, over Finland, and the north of Sweden. Very little rain falling over our Islands during day, but 1·54 ins. occurring at Biarritz, 0·91 in. at Munich, 0·51 in. at Haparanda, and lesser amounts at several stations over the northern half of the Continent.

Temperature fallen except at some southern and eastern stations. Morning readings, highest, 85° at Patras, 84° Lesina, 82° at Algiers, 81° at Barcelona, 79° at Trieste, and 77° at Lemberg. Lowest, 49° at Bodö, 50° in the Shetlands and at North Shields, and 55° at Liverpool. Maxima during day, 55° at Aberdeen and at the mouth of the Tyne, and less than 60° at our northern stations generally, 67° in London, 72° at Hernosand, above 80° in almost all parts of southern and central Europe, and above 90° in places. Highest of all, 95° at Rome, and 108° at Tunis.

Barometer and Wind. 8 a.m. and 6 p.m.



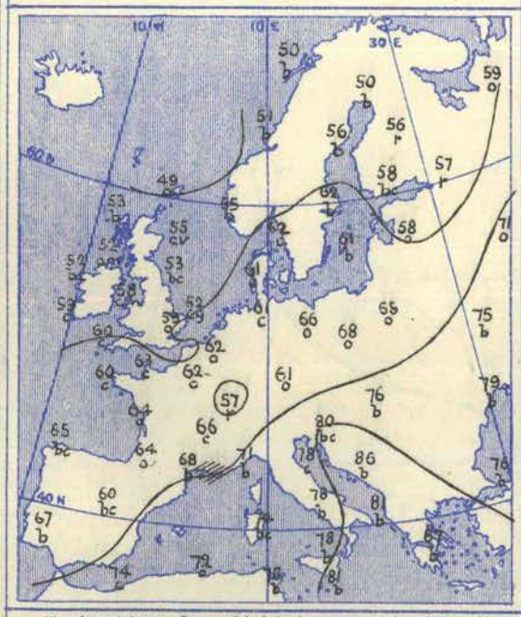


Wind at 8 a.m. showing a moderate to strong cyclonic circulation around Finland, and several other complete or partial cyclonic movements in different parts of our area. Scarcely any change later.

Barometer fallen quickly over the north of Russia and in Finland, risen slowly over the western and southern countries. Readings at 8 a.m. ranging from 30·13 ins. at Corunna, and but little lower over the south of Russia to about 29·4 ins. in a well-marked disturbance over Finland. Another, but smaller, depression lying over the north-east of Spain, near Barcelona. Pressure increasing very generally during day, but decreasing over the north-east of Russia. Both the baric minima remaining almost stationary later.

Monday, 20th July, 1903.

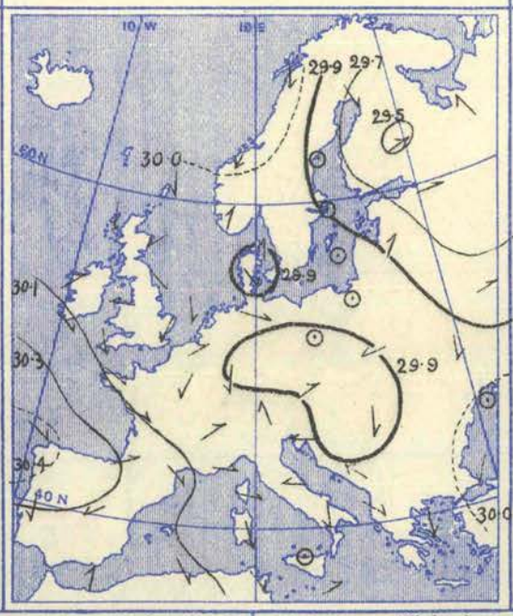
Temperature and Weather. 8 a.m.

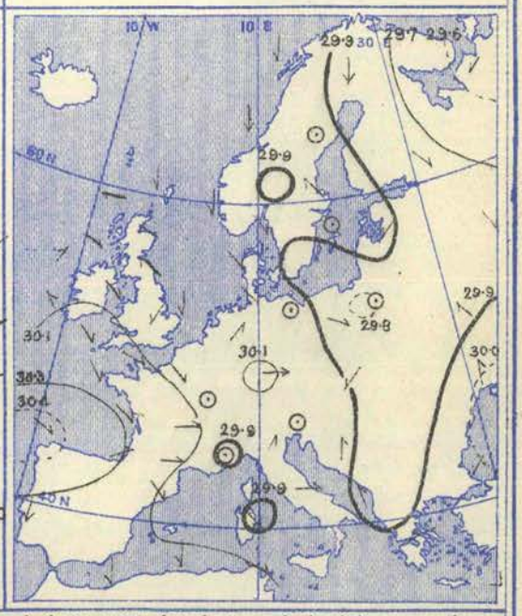


Weather at 8 a.m. fine and bright in most parts of Scandinavia, and sky continuing clear in most southern and south-eastern regions. Cloudy or overcast in nearly all other places, and rainy in Finland, at Swindemünde, and Belfort. Rain falling later in Ireland, and on the coasts of Sussex and Kent—with thunder in the latter district—and in very large quantities in different parts of France and Germany; 1·02 ins. at Biarritz, and 2·84 ins. at Frankfurt. Thunderstorm giving 0·43 in. of rain occurring at Paris.

Temperature changed irregularly. Morning readings, highest, 87° at Patras, 86° at Lesina, 81° at Malta, 77° at Leghorn, and 70° at the Mediterranean stations generally, and also over the southern half of Russia. Lowest, 49° at Sumburgh Head, 50° at Bodö and Haparanda, 52° at Malin Head, 53° at North Shields, and 54° at Oxford. Not exceeding 61° in London all day, but touching 68° on our south coast, and at Parsonstown. Maxima of 80° and above recorded over the southern countries generally, and readings of 93° at Buda Pesth, and 97° at Lesina and in Greece.

Barometer and Wind. 8 a.m. and 6 p.m.



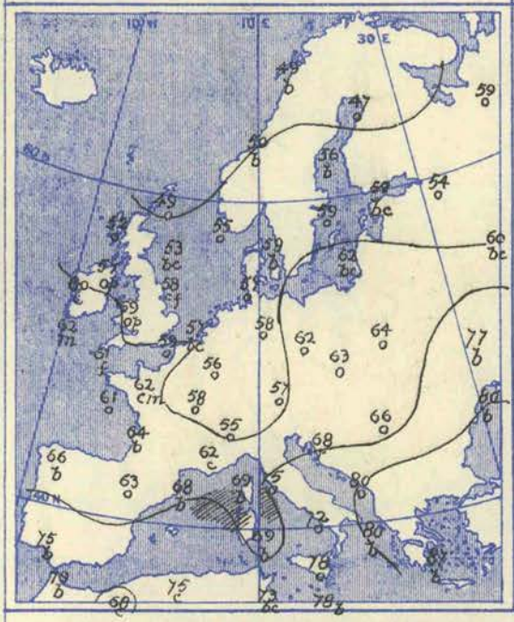


Wind at 8 a.m. still showing a cyclonic movement of moderate or fresh winds over northern Europe, and light and irregularly cyclonic breezes in most other places. Anticyclonic breezes (North-West to North-East) over the Iberian Peninsula. Latter extending eastwards by evening, and the northern cyclonic circulation becoming transferred towards Siberia. Wind backing to the Southward in the west of Ireland.

Barometer risen except in the far east. Morning readings ranging from 30·4 ins. in an anticyclone over and to the westward of Spain, and from above 30·6 ins. over the Black Sea to below 29·9 ins. in a very shallow area over central Europe, and in a small minimum near Nice, and to about 29·4 ins. in the centre of a depression lying over Finland. Latter disturbance moving away eastwards later, but distribution of pressure remaining irregular. Barometer falling again in Ireland.

Tuesday, 21st July, 1903.

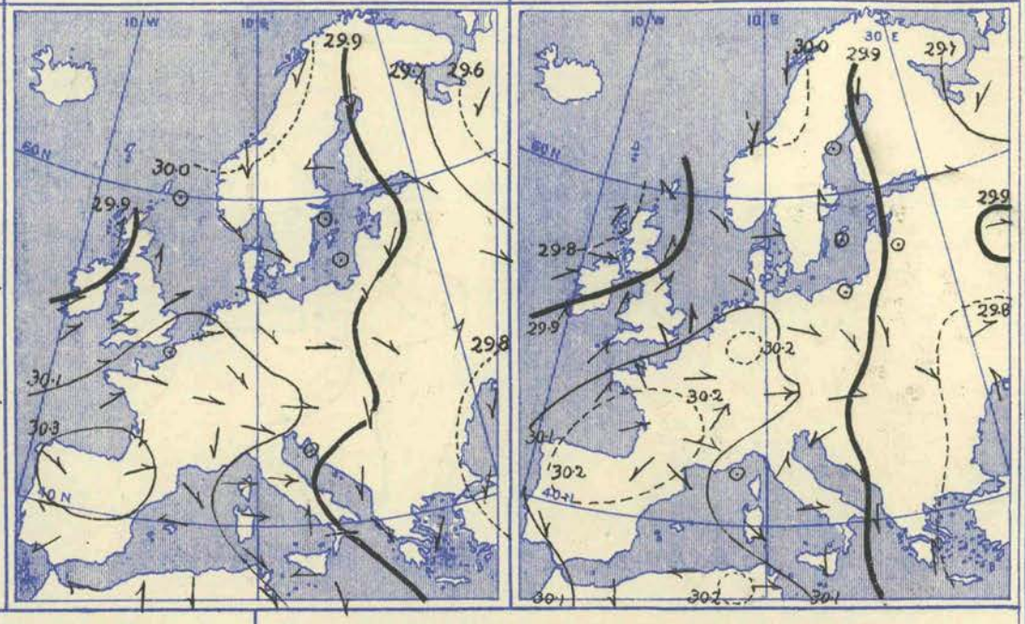
Temperature and Weather. 8 a.m.



Weather in morning cloudy or dull in most parts of our area, but fine in several southern and south-eastern localities, and also at a few isolated places in the north. Rain or showers prevailing in the west of our Islands, fog at Scilly, and rain at Buda Pesth and Trieste. Considerable falls of rain occurring in most parts of the United Kingdom later, and large amounts in central Europe—as much as 1·7 ins. at Cracow. A thunderstorm experienced at Lorient.

Temperature fallen in most regions—especially in Italy, over central Europe, and at Moscow. Readings at 8 a.m., highest, 87° at Athens, 79° at San Fernando, 77° at Kiev, and above 70° in the south generally. Lowest, 47° at Haparanda, 49° at Bodö and Sumburgh Head, 53° at Aberdeen, and 54° at St. Petersburg. Rising later to 73° at Paris and in London, to above 80° on many shores of the Mediterranean, and to nearly 100° at Athens. Maximum only 60° at Holyhead.

Barometer and Wind. 8 a.m. and 6 p.m.

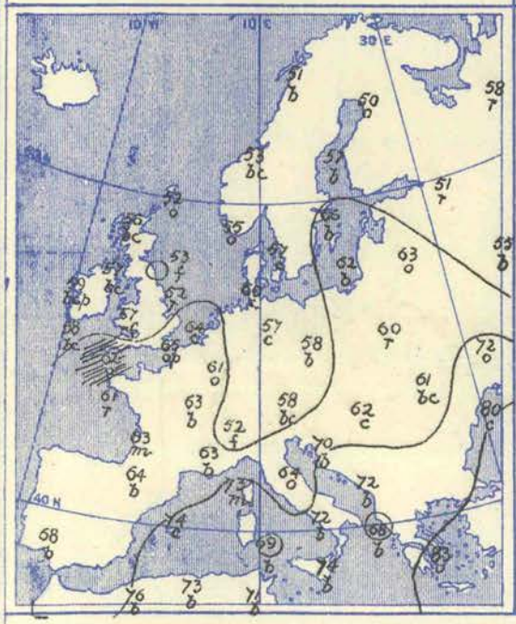


Wind in morning light and anticyclonic over the Iberian Peninsula, the Bay of Biscay, and the greater part of France; light or moderate from South or South-West over our Islands, and moderate to fresh from the Northward or North-Westward in most Scandinavian and Finnish districts. Fresh or strong from West over the Gulf of Genoa, and light and variable over the south-east of Europe. Very little change later.

Barometer fallen in Ireland and over south-eastern and eastern Europe, risen elsewhere. Morning readings ranging from above 30·3 ins. in an anticyclone over the north of Spain, and the adjacent portion of the Bay of Biscay, to 29·9 ins. in a small minimum over Lombardy, and to about 28·8 ins. in another and larger system off our own north-west coasts, and to less than 29·6 ins. in a third over the north of Russia. Anticyclone giving way slowly during day, and barometer falling over our area generally.

Wednesday, 22nd July, 1903.

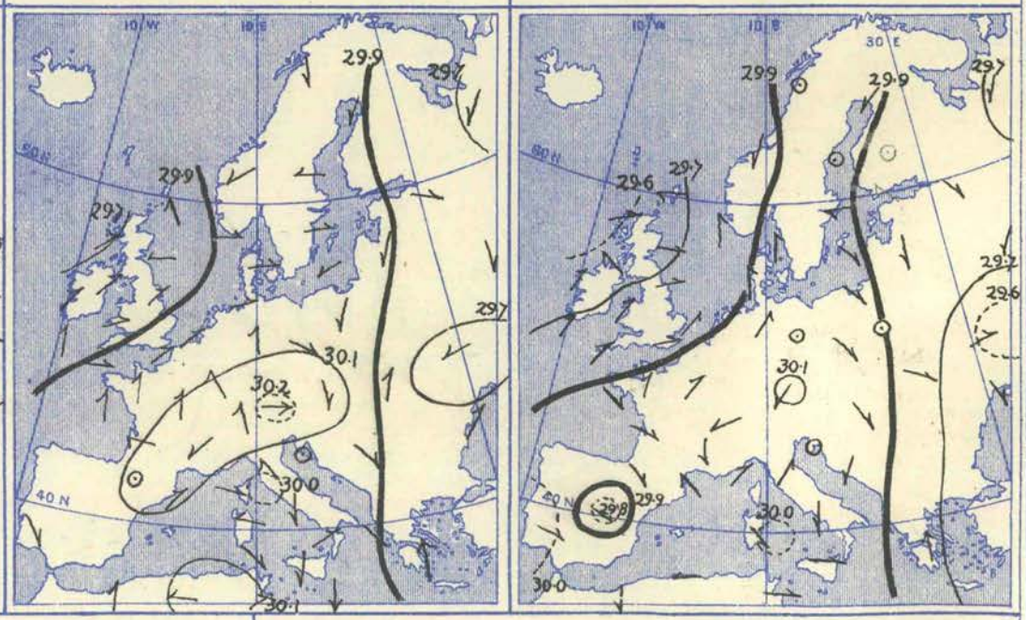
Temperature and Weather. 8 a.m.



Weather in morning fine in many Scandinavian localities, and at most southern stations; cloudy or dull as a whole; with showers or steady rain in several parts of our Islands, and fog at Holyhead and in Scotland. Thunder at Nairn. Rainy and thundery at some stations in Brittany, and rainy in Holland and at Warsaw, as well as over the north of Russia. Rain later over the greater portion of the United Kingdom, France, and the Netherlands, and a thunderstorm occurring at Biarritz.

Temperature fallen generally, but risen in most parts of Great Britain. Morning readings highest, 83° at Athens, 80° at Odessa, 74° at Barcelona, and remaining above 70° at most of the Mediterranean stations. Lowest, 50° at Haparanda, 51° at Bodö and St. Petersburg, 52° in the Shetlands and at Belfort, 55° at Moscow, and 58° at Limoges. Maxima during day, 95° at Athens and Madrid, above 80° in many southern regions, above 70° over Germany, and the east of Great Britain and at Stockholm, but not much above 60° at several of our own western stations.

Barometer and Wind. 8 a.m. and 6 p.m.

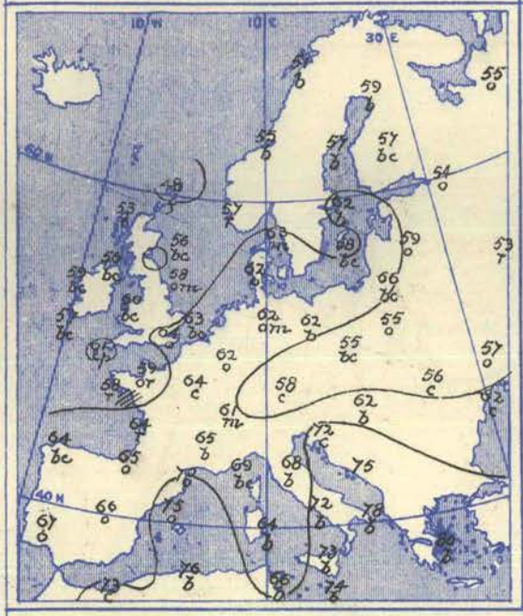


Wind at 8 a.m. light and anticyclonic over France and the adjacent portion of the Continent· Southerly to South-Westerly, light or moderate, over Ireland and England, and light from the Eastward in Scotland. Light from the Northward over Finland and northern Russia, and light and rather variable over the southern countries. Wind shifting to the South-Westward or Westward in Scotland later, but not much change elsewhere.

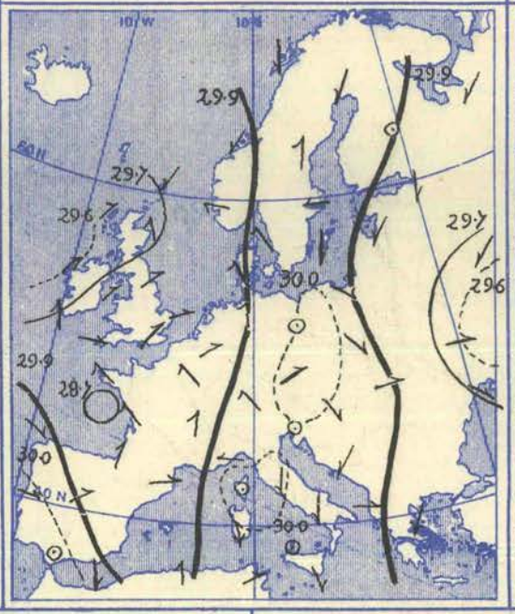
Barometer fallen in most countries in the western part of our area, in Algeria, and the south of Russia, risen elsewhere. Readings at 8 a.m. ranging from 30·1 to 30·2 ins. in an anticyclone over France and the south-west of Germany, and also in the neighbourhood of Oporto, to 29·7 ins. (1) in a small minimum over Nairnshire, and in a larger depression off the Hebrides, and (2) in two systems over Russia—one in the north and the other in the south. Anticyclone giving way later, and barometer falling in most parts of our area. A well defined depression appearing over Spain.

Thursday, 23rd July, 1903.

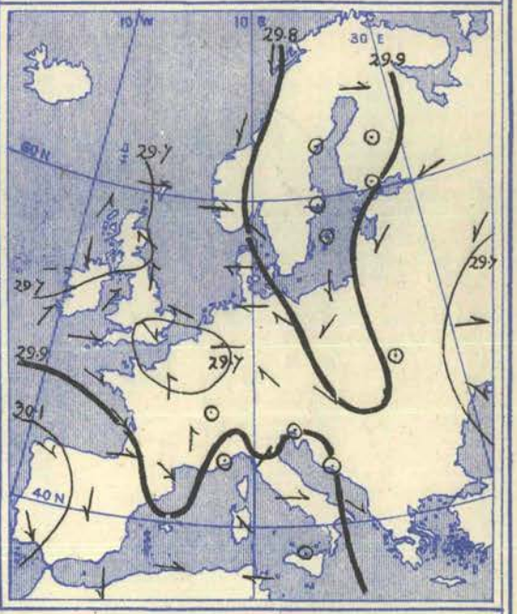
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning remaining fine in most southern regions and in Sweden, but much cloud prevailing elsewhere, with rain in the west of France, showers on our south-west coasts, rain at The Helder, Nairn, and Stornoway, as well as at Skudesnaes and Moscow. Very heavy rain falling later over Germany, France, the Netherlands, and the south-east of England. As much as 2·1 ins. at Flushing, 1·7 ins. at Cape Grisnez, 1·5 ins. in London, and more than 3·1 ins. at Greenwich. Thunderstorms occurring over France, and thunder only at Aberdeen and Roche's Point.

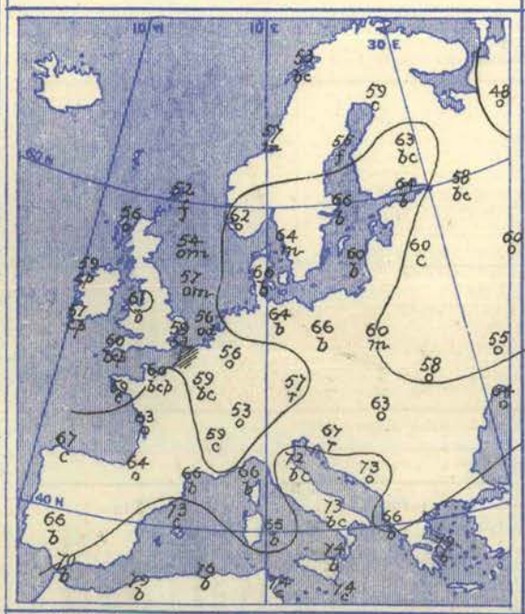
Temperature at 8 a.m., highest, above 70° at many Mediterranean stations and 80° at Athens. Lowest, 48° at Sumburgh Head, 51° at Bodö, and 56° at Parsonstown. Maxima during day, 73° in London, 80° or above in parts of Germany, and at nearly all the southern stations. Highest readings of all, 97° at Tunis, and 115° at Biskra. Thermometer only rising to 62° at Pembroke, and to 53° at Sumburgh Head.

Wind in morning light and anticyclonic over central Europe, cyclonic elsewhere, but of little force. Complete circulations shown around the Bay of Biscay and the south of Russia, and a Southerly to South-Westerly breeze over Great Britain. Latter movement being transferred some distance to the eastward later, and that over the Bay to the north-east of France and its neighbourhood.

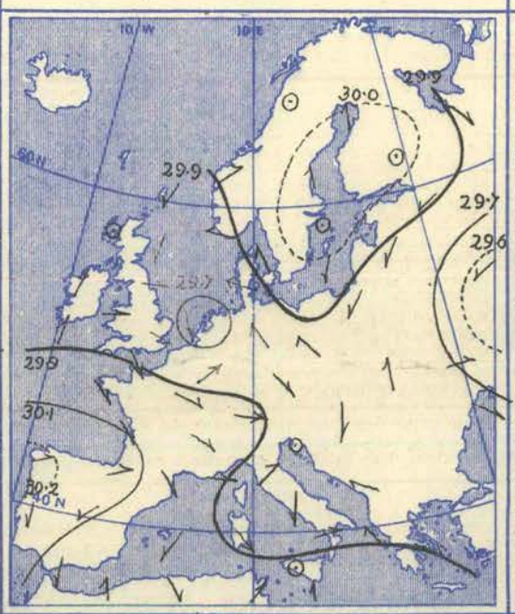
Barometer fallen in nearly all parts of our area. Readings at 8 a.m. ranging from 29·9 ins. to 30·0 ins. and upwards, in a long band stretching from Malta and Sicily northwards to Lapland, to 29·7 ins. in a depression over the Bay of Biscay, to below 29·6 ins. in another off our north-west coasts, and to below 29·5 ins. in a third system over the south of Russia. Anticyclone band partially dispersing later, and disturbance in the Bay moving briskly north-eastwards. Russian depression disappearing eastwards, and that off our north-west coasts apparently travelling away northwards.

Friday, 24th July, 1903.

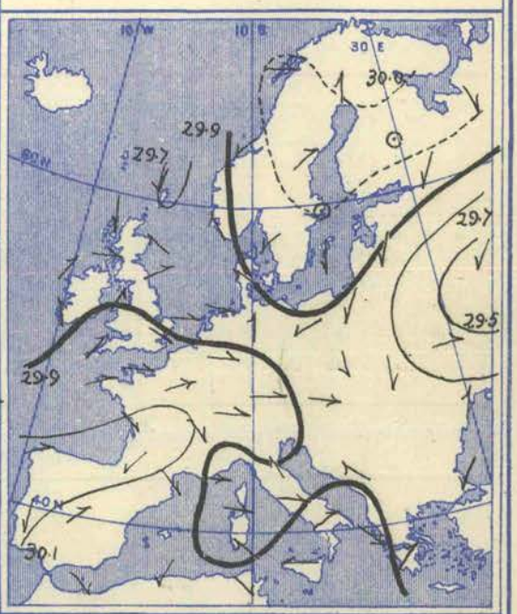
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the western parts of the United Kingdom generally, but showery in the west of Ireland; foggy on the north-east coast of Scotland; dull and rainy in the east and south-east of England, and in adjacent parts of the Continent. Fine in most other parts of Europe, but dull in the west of France, and rainy over western and southern Germany. Improvement taking place later in the east and south-east of England, but rain falling in many parts of France, Germany, and central and southern Russia—heavily at Frankfurt.

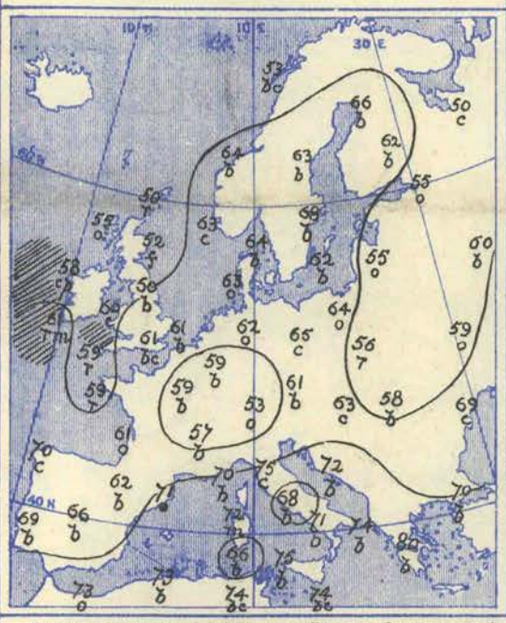
Temperature fallen in most countries, but risen over Scandinavia, Denmark, and north Germany. Morning readings, highest, 79° at Oran and Athens, and 77° at Palma, La Calle, and Aumule; above 70° at most of the Italian and Mediterranean stations, and as high as 66° at Stockholm and Berlin. Lowest, (1) 48° at Archangel, (2) 52° at Sumburgh Head, 53° at Bodö, and 54° at Wick and Aberdeen. Rising during day to between 65° and 70° in most parts of the United Kingdom, and to 75° at Leith; exceeding 80° over southern Europe, and reaching 88° at Madrid and Naples.

Wind light to moderate from the South-Westward in Ireland, and variable in Scotland. Moderate to fresh from the Westward or North-Westward over England and France; variable in Italy and Austria, Easterly or South-Easterly over Denmark and north Germany. Light from the North-Eastward over northern and central Russia, but from the Westward in the south of Russia. Northerly to Easterly over the Spanish Peninsula. Subsequently backing to the Westward in the south and east of England; no important change occurring elsewhere.

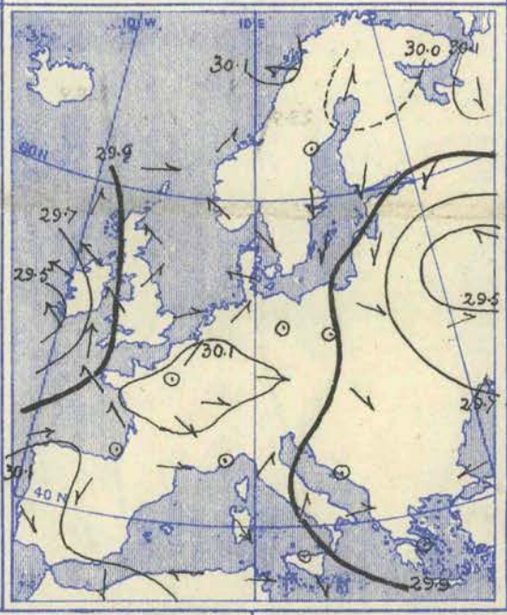
Barometer highest, 30·2 ins. and upwards to 30·0 ins. in an anticyclone over the Spanish Peninsula and the west and south of France; 30·0 ins. and upwards in another system over Sweden and Finland. Lowest, 29·6 ins. and less in a depression over the southern parts of Russia; 29·7 ins. and less in another disturbance over the Netherlands and the east of England. Latter system subsequently moving north-eastwards over the North Sea and dispersing; new but small and shallow disturbance appearing over the Shetlands in evening.

Saturday, 25th July, 1903.

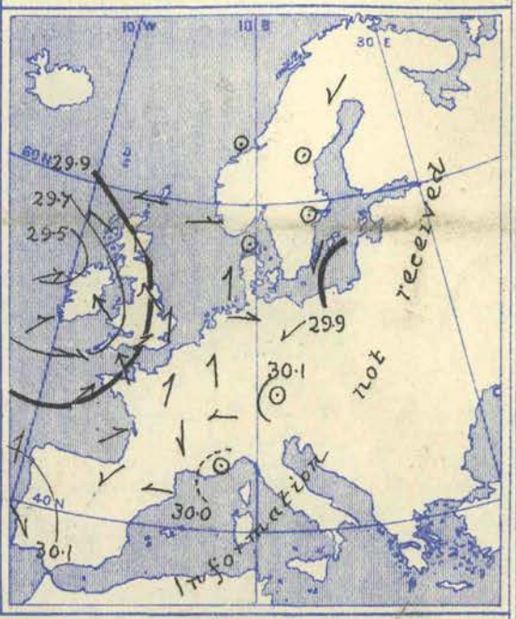
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather very fine and bright generally over the more southern and northern parts of the Continent, very variable in other regions, with rain at some stations in our Islands, in Brittany and in east-central Europe; on our north-east coasts the atmosphere misty to foggy. In the course of the day rain falling over nearly the whole of the United Kingdom, the largest amounts being in the south of England, Bath measuring 0·8 in., London 0·9 in., and Portland Bill 1·0 in. South of the Channel the amounts small.

Temperature varying a good deal even locally, the morning readings over our Islands ranging from 50° at Sumburgh Head, and 52° at Aberdeen to 62° at Leith and Dungeness, and 65° at Jersey. At many of the inland Continental stations, from France eastward into Russia, the values from 53° to 59°, while along the Mediterranean shores most of them 70° and upwards—to 80° at Athens. During the day the maximum attained at Sumburgh Head only 55°, and at Wick and Aberdeen 56°, against 70° at Nottingham, and 72° at Nairn, Leith, and in London. Many maxima in Scandinavia from 72° to 75°, few parts of western Europe exceeding 75°, but Perpignan reaching 81°, and Nice and Rochefort, 82°.

Wind in morning circulating cyclonically around depressions off Ireland, and in central Russia; over western Europe and Scandinavia—anticyclonic circulations. Strong breezes to a moderate gale reported at several stations on our western and south-western coasts, but over Scotland, the greater part of England, and over the Continent generally, moderate to very light breezes prevailed. Later the wind increasing to a fresh gale along the north-west and north coasts of Ireland and freshening to a strong breeze on the Bay of Biscay, no great change taking place elsewhere.

Barometer at 8 a.m. ranging from 30·10 ins. and upwards in anticyclones situated over Portugal and western Algeria, France, and south Germany, and the extreme north of Europe, to 29·48 ins. in a well-marked depression advancing towards the west of Ireland, and 29·49 ins. in another, centred in the neighbourhood of Moscow. The Atlantic disturbance moving up our western coasts during the day, being off Scotland in the evening. In most Continental countries the barometer exhibiting a tendency to give way.

IV.—GENERAL NOTES, etc.

Over Europe as a whole, the general distribution of pressure this week was rather complex. At the beginning of the period the highest barometer readings were reported, as a rule, over the western and southern countries, while the lowest were found in a well-marked depression which lay at first over Finland, but which afterwards moved away to the north-eastward; the winds over western Europe being mainly from some Northerly direction. Between the 20th and 22nd, however, an anticyclone which had come in from the Atlantic moved steadily eastwards across France and central Europe, and in its rear a series of cyclonic areas began to move northwards, along our extreme western coasts, the wind in our islands backing to the South-westward or Southward. On the 23rd, a well-marked secondary depression moved north-eastwards from the Bay of Biscay to the southern part of the North Sea, its progress being attended by very heavy falls of rain in the east and south-east of England. Towards the close of the week this system was dispersing, but a new disturbance of considerable depth for the time of year was moving along our western coasts, and occasioning gales from the South-eastward in Ireland, while a shallow secondary was advancing over England and causing heavy rain over our southern counties.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 170.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	26·2	- 5·1	22	- 4
STRATHPEFFER SPA	50·5	+22·1	43	+ 19
EDINBURGH	45·0	+12·6	39	+ 11
COCKLE PARK	40·0	—	35	—
NEWCASTLE-ON-TYNE	28·8	—	25	—
YORK	26·9	-11·8	24	- 11
CROMER	36·5	—	33	—
LOWESTOFT	36·9	—	33	—
DUNMOW	25·3	—	23	—
SHEFFIELD	30·2	—	27	0
WORKSOP	29·5	- 7·1	26	- 6
THURCASTON	26·8	-12·8	24	- 12
TUNBRIDGE WELLS	33·7	—	31	—
MARGATE	33·1	-12·1	30	- 11
BROADSTAIRS	38·2	—	35	—
RAMSGATE	...	—	—	—
EASTBOURNE	42·6	- 9·2	39	- 8
BRIGHTON	41·4	-10·3	38	- 9
WORTHING	42·1	—	39	—
BOGNOR	42·8†	—	39†	—
WATERGATE PARK	34·4	—	32	—
WESTBOURNE	40·2†	-10·1	37†	- 9
VENTNOR HOSPITAL	38·7	- 9·6	36	- 9
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	20·9	-21·1	19	- 19
SOUTHPORT	42·8	—	38	—
RHYL	41·6	—	37	—
ABERDOVEY	46·6†	—	42†	0
TENBY	57·1	+11·1	52	+ 10
TORQUAY	39·5	- 9·3	36	- 9
NEWQUAY	52·8	+ 4·9	48	+ 5
GUERNSEY	40·0†	-16·8	37†	— 16

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

Date of Report.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending July 11th, 1903.	Churchstoke	81	41	70·8	49·2	59·3	+ 1·9	121	0	2	0·12	- 0·41	57·9	+15·3	51	+ 13
" " " "	Laudale	66	43	61.1	48.2	54.2	- 2.5	85	0	5	2·07	+ 0.96	—	—	—	—
" " " "	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	64·2	—	57	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 30.] *Third Series.* WEEK ENDING SATURDAY, AUGUST 1ST, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 176.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903, Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	68	41	59·5	49·2	54·0	1 below	84	− 4‡	0	0	1040	− 77	491	− 47
	1. SCOTLAND, EAST	73	41	62·4	49·4	55·4	1 below	94	− 9	0	0	1230	−130	502	− 81
	2. ENGLAND, N.E.	73	47	64·5	51·6	57·6	1 below	109	− 6	0	0	1421	− 18	342	−137
	3. ENGLAND, EAST	72	44	65·0	52·3	58·2	3 below	113	−14	0	0	1704	0	322	−203
	4. MIDLAND COUNTIES	74	44	65·3	51·5	57·9	2 below	111	−13‡	0	0	1618	−103	355	−180
	5. ENGLAND, SOUTH	71	46	64·6	54·1	59·0	2 below	119	−16	0	0	1804	− 54	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	70	45	63·6	50·6	56·6	1 below	102	− 4	0	0	1400	− 49	317	− 96
	7. ENGLAND, N.W.	70	40	62·7	52·7	57·3	2 below	107	−10‡	0	0	1543	− 22	259	−129
	8. ENGLAND, S.W.	69	47	64·0	53·6	58·5	2 below	116	− 7	0	0	1773	+ 25	162	−138
	9. IRELAND, NORTH	68	43	61·9	50·5	55·8	2 below	97	−11	0	0	1438	−107	286	− 61
	10. IRELAND, SOUTH	68	45	64·0	51·9	57·5	2 below	109	− 9	0	0	1771	− 2	183	− 67
	— CHANNEL ISLANDS	67	53	64·8	56·9	60·6	1 below	130	− 6	0	0	2038	+ 62	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 176.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	5	4 less	143	+19	37·4	+12·4	17	−11	15	− 9	681	− 94	24	− 3
	1. SCOTLAND, EAST	5	14	8 more	123	+15	22·2	+ 6·1	19	−16	17	−15	735	−133	26	− 5
	2. ENGLAND, N.E.	5	15	9 more	103	+ 4	15·2	+ 2·2	23	−12	21	−11	811	− 94	29	− 3
	3. ENGLAND, EAST	5	11	6 more	93	− 8	15·9	+ 3·4	24	−22	22	−21	948	− 85	34	− 3
	4. MIDLAND COUNTIES	5	7	1 more	101	+ 5	17·7	+ 3·1	26	−16	24	−15	820	− 72	30	− 3
	5. ENGLAND, SOUTH	6	13	8 more	104	+10	18·7	+ 4·6	24	−21	22	−19	1012	− 25	37	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	5	8	1 less	132	+20	34·2	+ 9·0	33	0	30	0	829	− 82	30	− 3
	7. ENGLAND, N.W.	5	8	0 (average)	120	+16	21·2	+ 4·3	33	− 2	30	− 2	911*	+ 8	33	0
	8. ENGLAND, S.W.	6	11	4 more	117	+11	24·3	+ 4·8	38	− 7	35	− 6	985	− 92	36	− 3
	9. IRELAND, NORTH	6	8	0 (average)	145	+18	24·0	+ 5·6	28	− 2	26	− 1	730	−116	26	− 4
	10. IRELAND, SOUTH	5	11	3 more	131	+17	27·0	+ 5·9	34	0	31	0	826	−125	30	− 5
	— CHANNEL ISLANDS	5	9	4 more	123	+15	17·7	+ 1·8	44	−10	42	− 9	1174	− 54	43	− 2

* This value has been altered owing to the receipt of further information.
‡ The corresponding values in last week's Report should read "−9," "−7," and "−3" respectively.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was again in a very unsettled condition, with frequent, and in many cases heavy, falls of rain. Thunderstorms occurred in several parts of Ireland on Sunday, in the north of Ireland only on Monday, and over a considerable portion of England on Wednesday.

Temperature was below the mean, the deficit being slight (only 1°) in Scotland, England N.E. and the Channel Islands, but rather large (3°) in England N.E. The highest readings, which occurred at various times in the different districts, ranged from 74° in the Midland Counties and 73° in Scotland E. and England N.E. to 68° in Ireland and Scotland N. and to 67° in the Channel Islands. In the middle part of the week the daily maxima on our north-east coasts were often below 60°, and in some places below 55°. The lowest readings also occurred on varying dates, and ranged from 40° in England N.W. and 41° in Scotland N. and E. to 47° in England N.E. and S.W. and to 53° in the Channel Islands.

Rainfall was considerably in excess of the average over the United Kingdom generally, but was about equal to the normal in England N.W. and Ireland N. and slightly in defect in Scotland N. In Scotland E. and England N.E., E. and S. the total amount was more than twice as much as the weekly average, the largest aggregates reported at individual stations being 3·5 ins. at Marchmont, 2·8 ins. at Shields, and 2·2 ins. at Hastings (St. Leonards).

Bright Sunshine was less than the normal, the deficiency being slight in most of the Grazing districts, but large in the Wheat-Producing districts. The percentage of the possible duration ranged from 42 in the Channel Islands and 35 in England S.W. to 17 in Scotland E. and 15 in Scotland N.

Barometer and Wind. The barometer was mostly highest over Spain and the south-west of France, but was somewhat high also over northern Europe. In our Islands the weather was affected by cyclonic disturbances which advanced from the Atlantic, the most important of these being two well-marked systems, which travelled north-eastwards in quick succession on Monday and Tuesday from the south of Ireland and across England to the North Sea. During their passage the wind was fresh or strong from between South and West on our southern coasts, but light from the Eastward (South-East to North-East) over the northern parts of the country. On reaching the North Sea the two disturbances coalesced and moved on to the south of Norway, in which position the combined area remained until nearly the end of the week. In its rear the wind shifted to West or North-West, but owing to the passage of small secondary depressions over the United Kingdom the weather remained in a very changeable showery state. At the close of the time fresh disturbances were beginning to appear off our western coasts.

307 | 70 Wy. & S. Ltd.
219 | 90 12 | 02

II.—DATA from which the SUMMARY on page 175 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	56	47	54·7	48·6	51·4	− 1·5	66	0	5	0·46	− 0·14	*	*	*	*
	Stornoway	65	43	60·7	47·7	53·8	− 0·6	83	0	4	0·16	− 0·57	25·3	− 5·4	22	− 5
	Wick	63	47	56·1	49·0	52·3	− 2·8	72	0	7	1·00	+ 0·42	*	*	*	*
	Lairg 𝑆	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Glencarron 𝑆	66	43	60·7	48·0	53·9	− 0·8	83	0	5	0·83	− 0·59	*	*	*	*
	Fort Augustus 𝑆	68	41	63·5	50·3	56·4	− 0·1	101	0	3	0·25	− 0·48	13·6	− 7·1	12	− 6
	Fort William	63	45	61·3	51·5	56·1	− 0·7	99	0	5	0·28	− 0·95	18·3	− 8·1	16	− 7
1. SCOTLAND, E.	Nairn	66	46	61·7	49·6	55·2	− 1·8	92	0	4	0·46	− 0·15	*	*	*	*
	Aberdeen	62	47	58·0	50·4	53·9	− 2·9	83	0	4	1·17	+ 0·52	18·4	− 17·9	16	− 16
	Braemar 𝑆	65	41	60·6	46·0	52·8	− 1·3	76	0	5	1·04	+ 0·31	*	*	*	*
	Ochtertyre 𝑆	70	43	65·1	49·4	56·7	− 1·2	103	0	5	0·52	− 0·25	*	*	*	*
	Leith	73	50	66·0	52·4	58·7	+ 0·1	117	0	4	1·92	+ 1·30	*	*	*	*
	Marchmont 𝑆	69	45	63·0	48·3	55·1	− 1·4	92	0	5	3·54	+ 2·77	19·0	− 18·1	17	− 16
2. ENGLAND, N.E.	Alnwick Castle	70	49	63·8	50·8	56·9	− 0·3	104	0	6	2·11	+ 1·45	*	*	*	*
	Durham	69	47	63·8	51·3	57·1	− 1·7	106	0	4	1·13	+ 0·49	24·6	− 11·5	22	− 10
	Shields	70	49	63·3	51·0	56·7	− 1·1	103	0	6	2·76	+ 2·16	*	*	*	*
	Scarborough 𝔐	73	48	66·1	50·7	57·9	− 1·1	111	0	5	1·08	+ 0·42	17·7	—	16	—
	Spurn Head	71	52	64·9	54·3	59·2	− 0·5	120	0	5	0·88	+ 0·50	*	*	*	*
	Fulbeck (Lincolnshire)	71	47	65·2	51·3	57·8	− 2·2	111	0	5	0·83	+ 0·30	23·2	—	21	—
3. ENGLAND, E.	Hillington 𝔐	70	44	64·5	49·4	56·4	− 4·0	101	0	5	1·18	+ 0·54	20·5	− 22·3	19	− 21
	Yarmouth	68	48	64·0	51·7	57·4	− 3·0	108	0	5	1·49	+ 0·94	*	*	*	*
	Geldeston	70	47	65·8	51·4	58·1	− 2·3	113	0	5	1·00	+ 0·48	23·0	− 22·8	21	− 21
	Cambridge	72	47	66·1	52·3	58·7	− 2·9	117	0	5	1·03	+ 0·49	20·0	− 24·6	19	− 23
	Felixstowe	69	51	64·7	53·8	58·9	− 1·8	118	0	5	1·33	—	25·3†	—	24†	—
	Rothamsted	69	47	64·1	51·8	57·5	− 2·8	109	0	7	0·76	+ 0·19	26·7	− 19·0	25	− 18
	Shoeburyness	70	53	65·7	55·9	60·5	− 0·9	130	0	6	1·16	+ 0·76	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	68	48	65·3	51·4	57·9	− 0·2	111	0	5	0·72	+ 0·10	32·6	—	30	—
	Bawtry (Hesley Hall)	73	45	66·6	51·1	58·3	− 1·8	114	0	4	0·31	− 0·24	*	*	*	*
	Nottingham	73	46	65·3	51·7	58·0	− 2·8	112	0	5	0·39	− 0·18	23·5	—	22	—
	Loughborough	73	44	66·1	51·6	58·4	− 2·7	115	0	5	0·71	+ 0·18	*	*	*	*
	Colly Weston (Stamford)	70	46	66·4	50·6	58·0	− 3·1	112	0	5	0·55	0·00	*	*	*	*
	Cheadle 𝔐	72	46	62·1	50·1	55·7	− 2·3	96	0	6	1·49	+ 0·76	*	*	*	*
	Birmingham (Edgbaston)	71	49	64·3	51·8	57·6	− 2·0	109	0	5	0·50	− 0·10	23·5	—	22	—
	Churchstoke 𝔐	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford 𝔐	74	47	67·1	52·2	59·1	− 1·3	120	0	4	0·47	− 0·06	*	*	*	*
	Cirencester	69	44	64·3	50·8	57·1	− 2·0	106	0	6	1·03	+ 0·37	26·9	− 16·4	25	− 15
	Oxford	70	50	65·0	53·6	58·9	− 2·2	118	0	6	0·87	+ 0·33	23·3	− 20·5	22	− 19
5. ENGLAND, S.	London	71	49	66·4	53·9	59·7	− 2·9	124	0	6	1·07	+ 0·56	20·7‡	− 20·2‡	19‡	− 19‡
	Swarraton (Alresford) 𝔐	69	46	64·3	52·8	58·2	− 1·2	113	0	5	1·08	+ 0·48	*	*	*	*
	Dungeness	67	52	65·1	55·9	60·2	− 1·5	127	0	6	1·52	+ 1·15	21·4	—	20	—
	Hastings (St. Leonards)	68	50	64·3	53·7	58·6	− 2·6	116	0	7	2·26	+ 1·74	23·3	− 27·4	22	− 26
	Southampton	71	51	67·1	54·6	60·4	− 1·8	129	0	5	1·06	+ 0·47	26·0	− 22·5	24	− 21
	Portland Bill	65	54	62·1	55·4	58·5	− 1·7	116	0	5	0·98	—	*	*	*	*
	Shaftesbury 𝔐	67	48	62·8	52·6	57·3	− 2·1	107	0	6	1·31	+ 0·67	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	70	45	62·4	48·4	54·9	− 2·2	90	0	5	0·36	− 0·84	*	*	*	*
	Glasgow	66	50	61·7	52·0	56·5	− 0·7	102	0	5	0·48	− 0·33	28·5	− 2·3	25	− 2
	Cally 𝑆	70	47	67·3	50·1	58·1	+ 1·1	113	0	5	0·82	− 0·12	*	*	*	*
	Aspatria	67	49	63·7	51·2	57·0	− 0·7	105	0	4	1·36	—	27·1	—	24	—
	Douglas (Isle of Man)	67	47	63·1	51·2	56·7	− 0·6	103	0	7	0·91	+ 0·17	44·3	+ 1·9	40	+ 2
7. ENGLAND, N.W.	Newton Rigg	68	40	63·5	49·1	55·8	− 1·3	97	0	4	0·94	—	29·7	—	27	—
	Stonyhurst	63	49	61·4	52·7	56·8	− 1·4	104	0	5	1·38	+ 0·35	31·2	− 6·1	28	− 6
	Blackpool 𝔐	64	48	62·3	54·1	57·9	+ 1·7	111	0	6	0·90	+ 0·17	42·2	+ 3·5	38	+ 3
	Manchester (Prestwich)	68	46	62·8	51·6	56·8	− 1·8	104	0	5	0·99	+ 0·16	24·4	—	22	—
	Liverpool Obsy. (Bidston)	65	50	61·9	53·7	57·5	− 2·4	109	0	5	0·30	− 0·35	34·8	—	32	—
	Chester (Hawarden Bridge)	70	49	63·8	53·3	58·2	− 1·8	113	0	5	0·63	—	*	*	*	*
	Llandudno 𝔐	67	52	63·2	54·4	58·5	− 1·6	116	0	5	0·70	+ 0·11	35·1	— 4·0	32	− 4
	Holyhead	66	51	62·4	52·6	57·2	− 1·6	106	0	5	0·42	− 0·18	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	62	52	60·9	54·7	57·6	− 1·3	109	0	4	0·54	− 0·06	36·6	− 8·6	34	− 8
	Clifton	68	51	64·5	54·5	59·2	− 1·6	120	0	7	0·76	+ 0·04	*	*	*	*
	Bath	68	47	65·4	52·7	58·6	− 3·0	116	0	5	1·02	+ 0·42	29·9	—	28	—
	Arlington (N. Devon)	64	50	61·6	52·1	56·5	− 2·2	102	0	7	1·06	+ 0·02	*	*	*	*
	Cullompton 𝔐	69	49	65·8	52·2	58·5	− 2·4	116	0	6	1·38	+ 0·73	33·0	− 8·9	31	− 8
	Falmouth	66	55	64·6	55·0	59·5	− 0·8	123	0	6	1·81	+ 1·08	48·4	− 1·4	46	− 1
	Plymouth	68	50	65·1	54·2	59·3	− 1·8	121	0	6	1·43	+ 0·79	40·1	− 5·9	38	− 6
9. IRELAND, N.	Malin Head	62	51	59·1	51·7	55·2	− 2·2	92	0	7	1·68	+ 0·98	*	*	*	*
	Edenfel (Omagh)	64	45	61·6	49·3	55·0	− 1·6	91	0	5	0·55	− 0·27	*	*	*	*
	Blacksod Point	63	50	61·6	58·4	57·2	− 0·8	106	0	6	1·11	+ 0·27	*	*	*	*
	Markree Castle	66	43	62·8	48·2	55·0	− 1·8	91	0	6	0·72	− 0·15	26·6	− 2·4	24	− 2
	Armagh	68	49	64·4	50·0	56·7	− 1·0	103	0	4	0·46	− 0·27	29·6	− 0·6	27	− 1
	Donaghadee	67	47	61·9	50·6	55·9	− 1·5	97	0	5	0·28	− 0·40	*	*	*	*
10. IRELAND, S.	Dublin	66	51	64·1	52·6	58·0	− 1·9	112	0	6	0·82	+ 0·19	41·8	+ 4·7	38	+ 4
	Birr Castle	67	47	63·0	50·7	56·4	− 2·1	101	0	6	1·47	+ 0·72	28·9	− 2·4	27	− 2
	Kilkenny	66	45	63·6	50·6	56·7	− 2·2	103	0	4	1·30	+ 0·65	*	*	*	*
	Waterford	67	45	65·3	50·6	57·4	− 1·2	108	0	?4	1·17	+ 0·35	*	*	*	*
	Roche's Point	67	48	64·6	52·6	58·2	− 1·5	113	0	4	0·47	− 0·28	*	*	*	*
	Valencia	64	51	62·1	53·7	57·6	− 1·3	109	0	6	0·90	− 0·09	31·4	− 3·0	29	− 3
	Killarney	68	49	65·3	52·2	58·3	− 0·6	114	0	6	1·21	+ 0·31	*	*	*	*
	Foynes	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	67	56	64·6	56·9	60·5	− 0·2	130	0	5	0·93	+ 0·39	48·5	− 1·8	46	− 2
	Jersey	66	53	65·0	56·9	60·7	− 2·1	131	0	4	0·93	+ 0·39	40·1	− 15·2	38	− 14

Stations Marked 𝔐 are in connection with the Royal Meteorological Society, and those marked 𝑆 with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

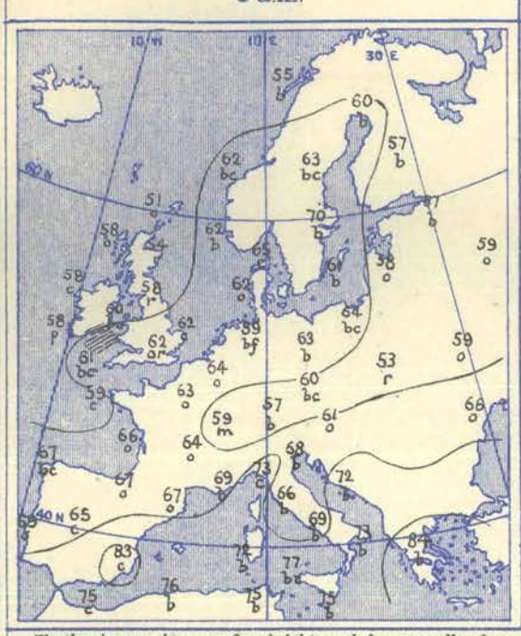
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 33 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 26th July, 1903.

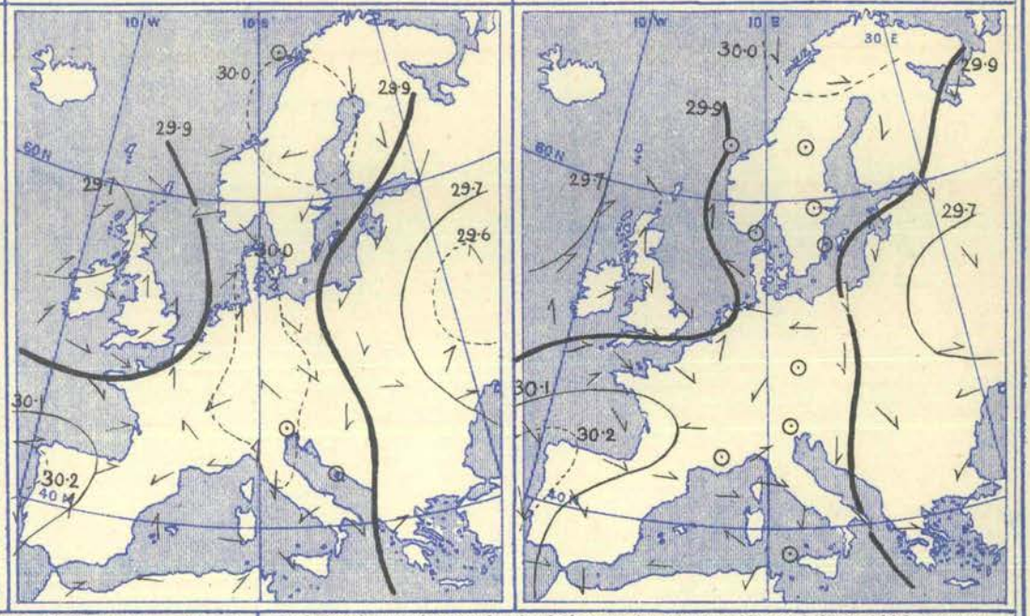
Temperature and Weather. 8 a.m.



Weather in morning very fine, bright, and dry generally along the Mediterranean coasts and over Scandinavia and northern Russia; variable elsewhere, from clear to overcast, with rain at many places in the east of Britain and at scattered stations on the Continent; showery on the west coast of Ireland and in the Channel Islands. Later rain falling over nearly the whole of our Islands and a great part of France, the Netherlands, and Germany; heavy locally, 1·4 ins. at Shields, 2·3 ins. at Brussels. Continuing fine over southern and northern Europe.

Temperature changes irregular both over our Islands and the Continent. Morning readings highest, (1) 84° at Athens, 83° at Alicante, and 79° at Barcelona; (2) 70° at Stockholm, 68° at the Helder, and 66° at Faerder, Hangö, and Helsingfors; and (3) 62° in London and at Yarmouth. Lowest, 51° at Sumburgh Head and 53° at Wick. Rising in the course of the day to 100° at Aumale, 97° at Biskra, 90° at Madrid, 89° at Cagliari, 79° at Berlin and Stockholm, 70° at Oxford, 69° in London, and 56° at Sumburgh Head and Wick.

Barometer and Wind. 8 a.m. and 6 p.m.

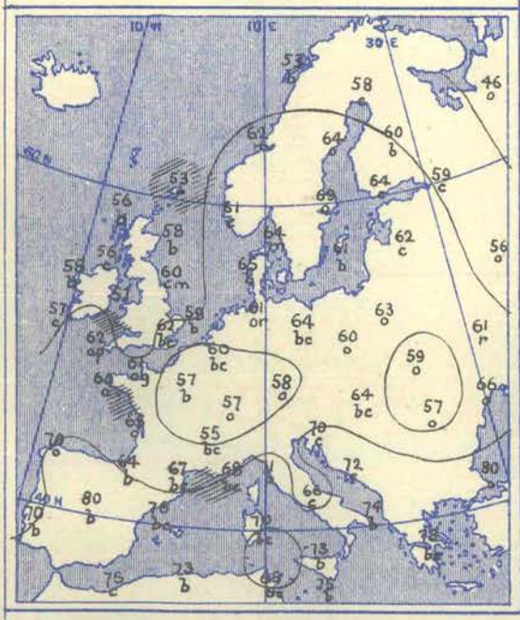


Wind direction varying greatly, circulating round two areas of low and three of high pressure. Blowing freshly from between North-West and South-West on some parts of the English Channel, moderate to very light everywhere else. By evening a fresh to strong Westerly breeze blowing on the Straits of Dover, little or no change taking place elsewhere, calms in many localities.

Barometer highest, 30·2 ins. and upwards in an anticyclone off the north-west of Spain, above 30·1 ins. in another centred over Bavaria, and above 30 ins. in a third situated over Scandinavia. Lowest, 29·6 ins. and less in a low-pressure system occupying central Russia, and 29·7 ins. and less in another situated to the westward of Scotland. A slight decline taking place during the day over Scandinavia and central Europe, a slow rise being reported in nearly all other regions.

Monday, 27th July, 1903.

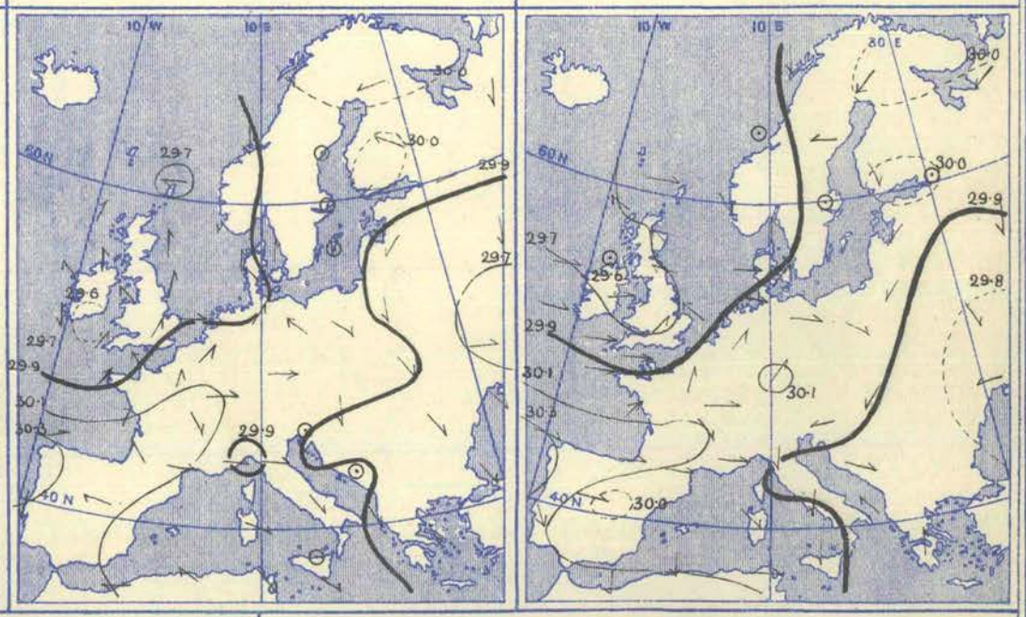
Temperature and Weather. 8 a.m.



Weather in morning dull, unsettled, and rainy over our south-western districts; rain also falling in the Shetlands, at Cuxhaven, and in south Russia; fair and cloudy to fine and clear in most other parts of Europe. Later the unsettled conditions becoming general over the British Isles, northern France, the Low Countries, and Italy.

Temperature risen at most of our northern and north-eastern stations, in Spain, Austria, Sweden, eastern Germany, and most parts of Russia, but fallen elsewhere. Highest morning readings, (1) 80° at Madrid and Constantinople, 78° at Athens and Barcelona, 77° at Aumale, and 76° at Oran; (2) 69° at Stockholm, 68° at Memel, and 67° at Wisby and Karlstad; and (3) only 55° at Clermont, Lyons, Donaghadee, Nairn, and Wick, 54° at Parsonstown, and 53° at Sumburgh Head and Bodö. During the day rising to 55° at Sumburgh Head and 59° at Donaghadee, 67° at Shields, 70° at St. Petersburg, 77° at Stockholm, 79° at Nice, 88° at Gap, 93° at Madrid, and 100° at Biskra.

Barometer and Wind. 8 a.m. and 6 p.m.

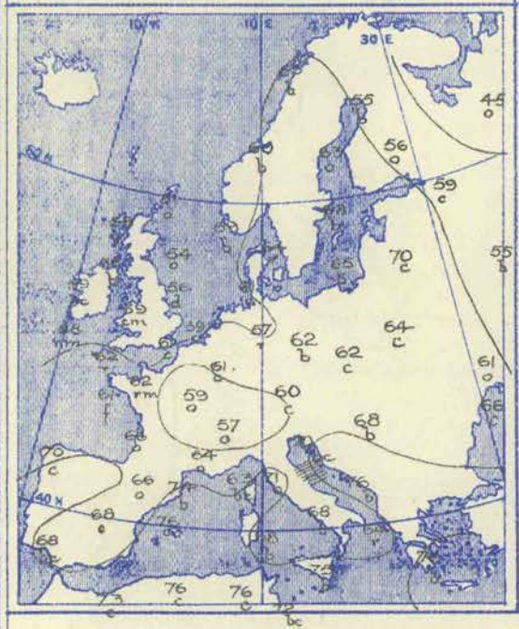


Wind from many directions, circulating round a number of high and low pressure systems fresh or strong from between South-West and South-East about our south-western coasts and the upper part of the Bay of Biscay, moderate to light or calm in all the other regions. The stronger breeze afterwards spreading all over the southern half of England and down to the north coast of Spain; no important alteration being experienced anywhere else.

Barometer highest 30·3 ins. and upwards off the north-west of Spain, and above 30 ins. in Finland and Lapland. Lowest 29·6 ins. and less in the centre of a disturbance on the south coast of Ireland. Below 29·7 ins. in a depression over south central Russia and in a small one over the Shetlands; and below 29·9 ins. in another on the Gulf of Genoa. A rise taking place on our south-western coasts and in south Russia by evening; a fall in other regions, principally over England, the disturbance from the south of Ireland moving up to North Wales.

Tuesday, 28th July, 1903.

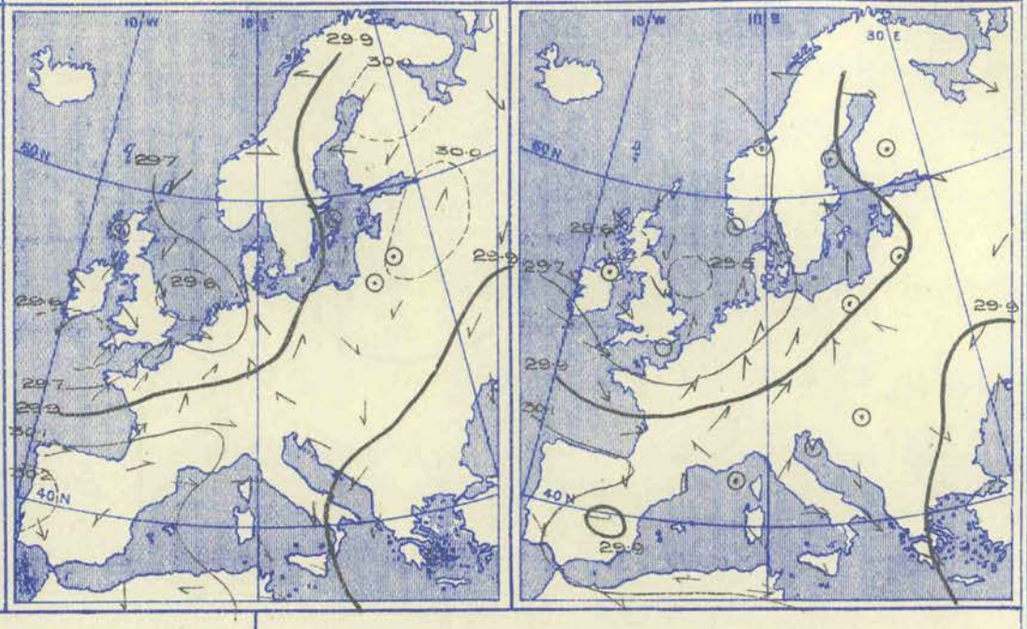
Temperature and Weather. 8 a.m.



Weather in morning fine and bright in central and northern Ireland, at many of the Baltic stations, as well as over Spain and Italy, cloudy and unsettled in most other places, with rain over all the southern parts of Ireland and England. Rain later over our Islands generally, and also at many of the Continental stations, the largest amounts recorded being 0·52 in. at Blacksod Point, and 0·66 in. at Plymouth. On the Continent the heaviest amounts were 1·02 ins. at Cuxhaven, 1·69 ins. at Brussels, and 1·85 ins. at Cape Gris Nez.

Temperature changed very irregularly. Morning readings highest, 76° at several Mediterranean stations, above 60° over our south-eastern counties, as well as over the greater part of the Continent. Lowest, 45° at Archangel, 51° at Sumburgh Head, 53° at Wick, and 54° at Aberdeen. Rising subsequently to 69° at Birmingham and Harrogate, to above 70° in the west of France, exceeding 80° at many southern European stations, touching 89° at Perpignan and Cagliari, and 90° at Palermo.

Barometer and Wind. 8 a.m. and 6 p.m.

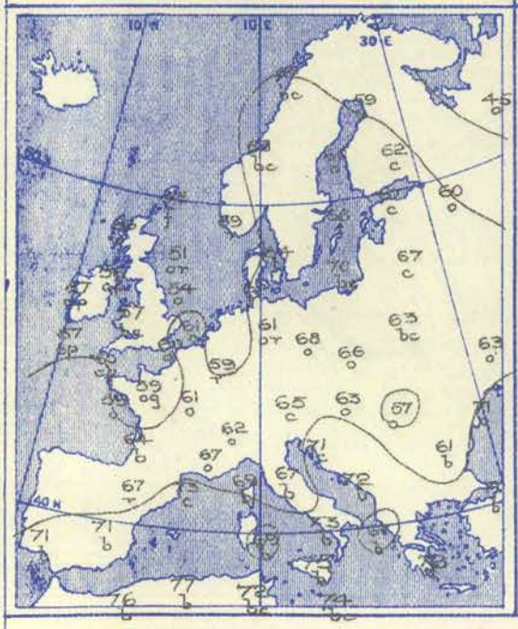


Wind moderate to fresh from the South-Westward over the southern parts of our Islands and in France, but two distinct cyclonic circulations shown, one over the North Sea, the other off our south-west coasts. Chiefly light from the Northward over Russia and south-eastern Europe, light and variable elsewhere. No material change later, but wind veering to North-West and West over Ireland and England.

Barometer falling slowly over our Islands and the adjacent parts of the Continent, rising somewhat in most other places. Morning readings highest, 30·2 ins. and more off the Portuguese coast, and 30·0 ins. and more over the Baltic Provinces. Lowest, 29·6 ins., and less in two shallow systems, one lying over the North Sea and the east of England, the other off our south-west coasts. Western depression dispersing later, that over the North Sea undergoing considerable modification in form.

Wednesday, 29th July, 1903.

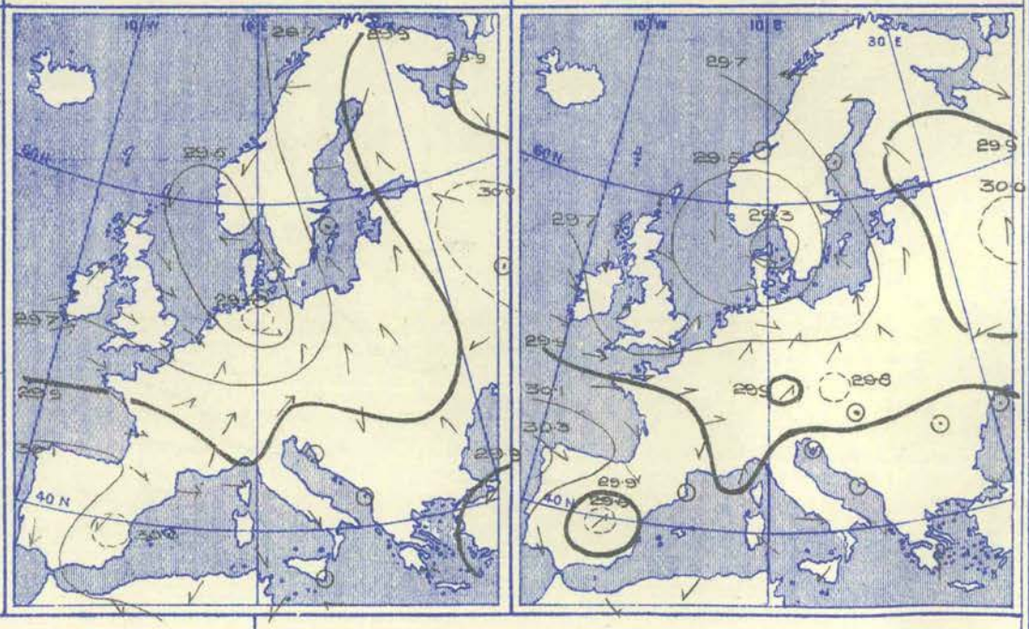
Temperature and Weather. 8 a.m.



Weather in morning mostly fine and clear round the Mediterranean basin; cloudy to overcast skies prevailing over the greater part of the British Isles and the Continental countries, with fog off the Shetlands, and showers or steady rain in various localities in our islands, at Biarritz, and between Brussels and Christiania. Rain later over our Islands and the neighbouring Continental countries, with thunderstorms at many southern English stations, the rainfall measured at Dungeness amounting to 0·8 in.

Temperature fallen somewhat over our Islands, risen a little at most of the Continental stations. Morning readings, highest 77° at Algiers, 76° at Athens and Oran, and 75° at Palermo, above 70° at several southern European stations, and exceeding 60° on the Continent generally. Lowest, 45° at Archangel, 51° at Wick and Aberdeen, and 53° at Sumburgh Head and Nairn. Rising during day to 67° in London, to considerably above 70° at many Scandinavian and German stations, reaching 80° over the Riviera, Italy, and Greece, touching 90° at Algiers, and 95° at Madrid.

Barometer and Wind. 8 a.m. and 6 p.m.

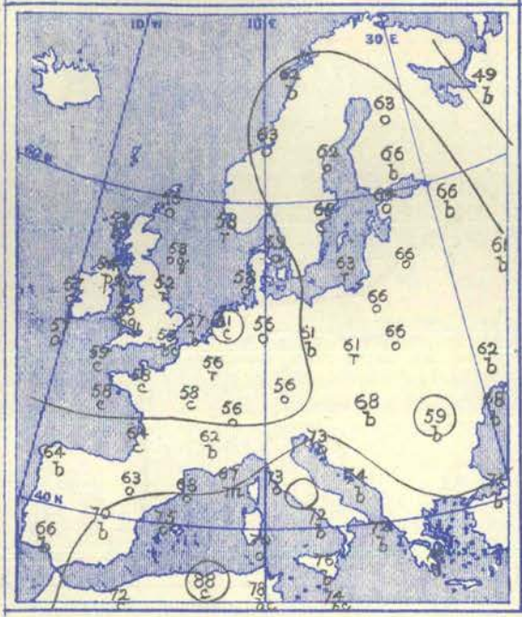


Wind showing a complete cyclonic circulation over the North Sea, Denmark, and the west of Norway, fresh to strong from the Westward over England, Ireland, and the greater part of France, light and variable in southern Europe, mainly light from the South-Eastward over Russia and central Europe. Wind veering to the Northward on our north-west coasts later. No change of importance elsewhere.

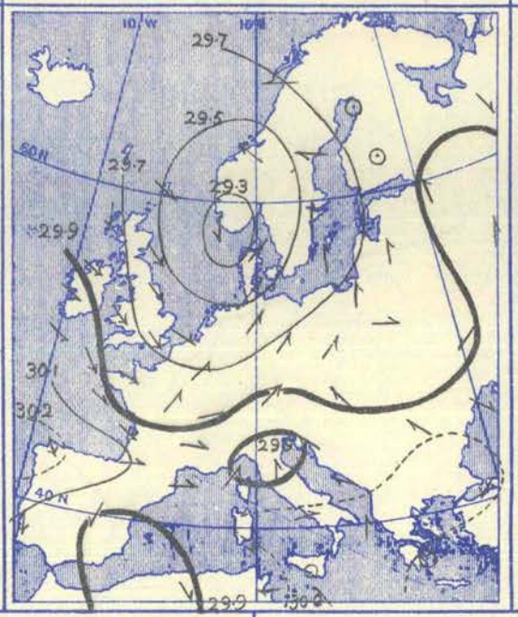
Barometer rising over England, and also at many Mediterranean stations, falling slowly in most other places. Readings in morning highest, 30·0 ins. and upwards over central Russia; lowest, 29·5 ins. and less in a shallow system over the North Sea, 29·9 ins. and less over Asia Minor, and 30·0 ins. and less in another area over central Spain. Depression over the North Sea moving eastwards later and becoming deeper, that over central Spain also increasing in intensity, but remaining stationary. No great change elsewhere.

Thursday, 30th July, 1903.

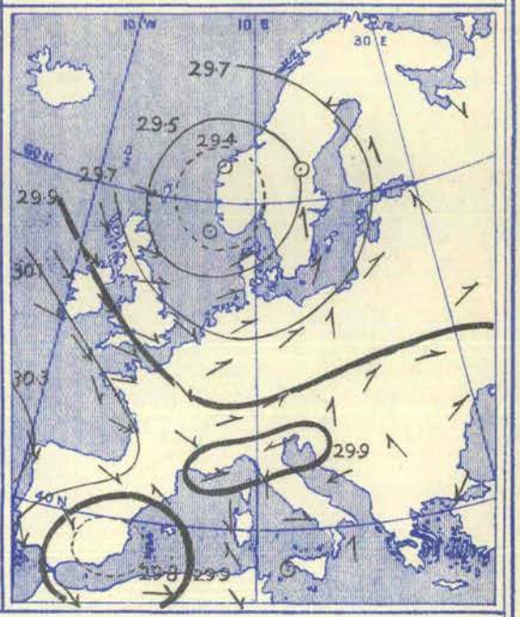
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull over north-western, northern and central Europe generally, with rain over the Netherlands and the north of France, as well as at Skudesnaes, and with passing showers at several of the English and Irish stations. Fine over Russia and the southern countries generally. Showers falling during day in many parts of the United Kingdom, and considerable quantities of rain in several parts of northern and central Europe; thunderstorm occurring at Cuxhaven at night.

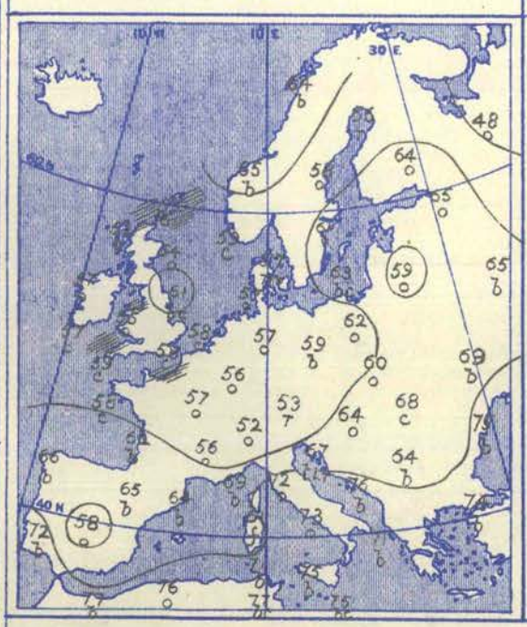
Temperature fallen in most places. Morning readings, highest 88° at Algiers, 79° at Aumale, 78° at La Calle and Athens, and 76° at Palermo; above 70° in many parts of southern Europe, and above 65° over Finland and the Baltic Provinces. Lowest, 50° at Sumburgh Head, 51° at Wick, and 52° at Stornoway and Shields; below 55° at several of our own northern stations. Daily maxima below 60° on our north-western and extreme northern coasts, and below 65° over the United Kingdom generally; but thermometer reaching 73° at Leith. Exceeding 80° over Austria and southern Europe, and exceeding 90° over Algeria and central Spain, the reading at Madrid being as high as 95°.

Wind fresh to strong from the North-Westward over the United Kingdom and the west of France; light to moderate from the South-westward over central France, the Netherlands, Germany and Denmark, and from the Southward over Russia and the Baltic. Easterly over the northern parts of Scandinavia. Variable over Greece and southern Italy; southerly over northern Italy. No decided change occurring during day.

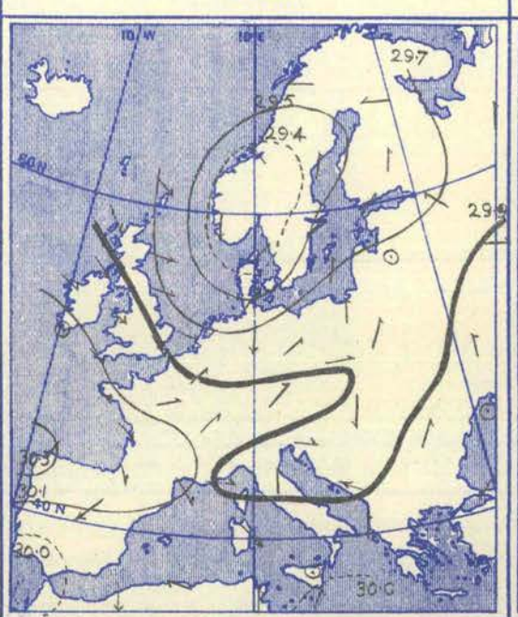
Barometer highest 30·2 ins. and upwards in the north-west of Spain; 30·0 ins. and less in an anticyclone extending from the westward over the south-west of Ireland, the Bay of Biscay, and the north and west of France, and also in other systems lying respectively over central Russia, and over Italy, Greece and the Balkan Provinces. Lowest, 29·3 ins. and less in a well-marked depression, with its centre over the south of Norway. Depression subsequently moving slowly in a North-Westerly direction; another disturbance, which lay in morning over Algeria and the south-eastern parts of Spain, travelling very slowly northwards and becoming somewhat deeper.

Friday, 31st July, 1903.

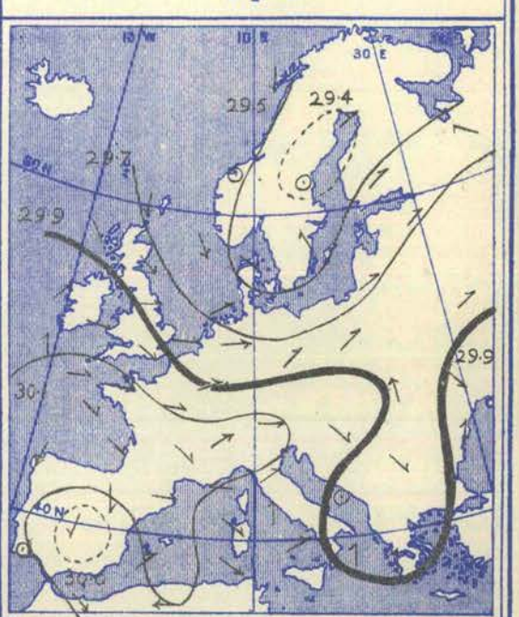
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning variable, fine or fair to dull and overcast over the British Isles and the Continent generally. Rain falling locally in Finland, south Norway, north Italy, Germany, and Austria, a thunderstorm at Trieste. Later some mist or fog at a few stations on our western coasts, showers over our northern and western districts, and rain at various stations in most Continental countries, 0·5 in. at Cuxhaven, Hamburg, Fanö, and Faerder, 0·6 in. at Ulleaborg, 0·7 in. at Pesaro, and 0·8 in. at Haparanda.

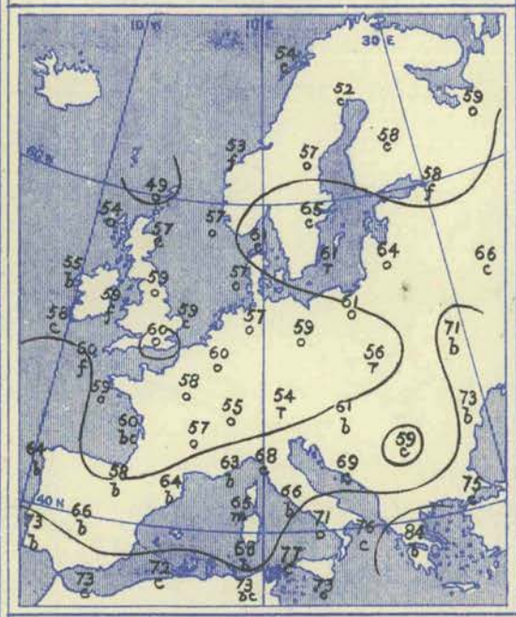
Temperature risen over nearly the whole of the United Kingdom, Norway, central and southern Russia, northern Spain, Portugal, and western Algeria, fallen in most other regions. Morning readings highest (1) 77° at Oran and Tunis, 76° at Lesina, 75° at Malta, La Calle, Palermo, and Odessa; (2) 65° at St. Petersburg and Christiansund, and 64° at Bodö; (3) 62° at Leith, 61° at Shields, 52° at Stornoway and Sumburgh Head, and 50° at Wick; also 52° to 55° in some parts of France and Germany. Rising in the course of the day to 52° at Wick and 54° at Stornoway and Sumburgh Head, 70° at Shields and 72° at Leith, the only hot weather being amongst the Mediterranean countries—78° at Nice to 92° at Biskra.

Wind fresh and strong from between North and West in many parts of the British Isles and south Norway in the morning, a moderate South-Westerly gale on the Danish coast; fresh or strong from various directions at several stations in southern Europe between the Atlantic and the Adriatic, moderate to light elsewhere. Later shifting into South in the west of Ireland, increasing to a moderate Northerly gale at Wick, and continuing to blow fresh or strong at many home and foreign stations, a moderate gale at Oran.

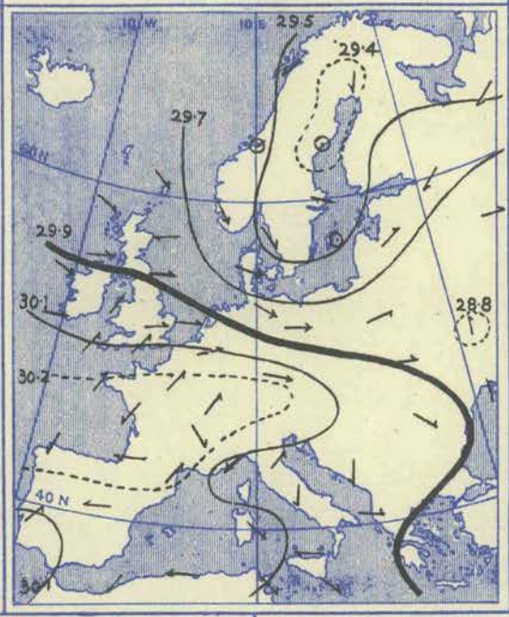
Barometer highest, 30·2 ins. and upwards in an anticyclone covering the Bay of Biscay and the ocean to the westward; 29·9 ins. and upwards over south-eastern Europe and south Russia. Lowest, 29·4 ins. and under, in the central space of a cyclonic system over southern Norway and north Denmark; 30 ins. and under in another off the south of Portugal. The Norwegian disturbance subsequently moving north-eastward into Sweden, the one in the far south-west passing into southern Spain, and on the Irish coasts indications of a new depression advancing from the ocean.

Saturday, 1st August, 1903.

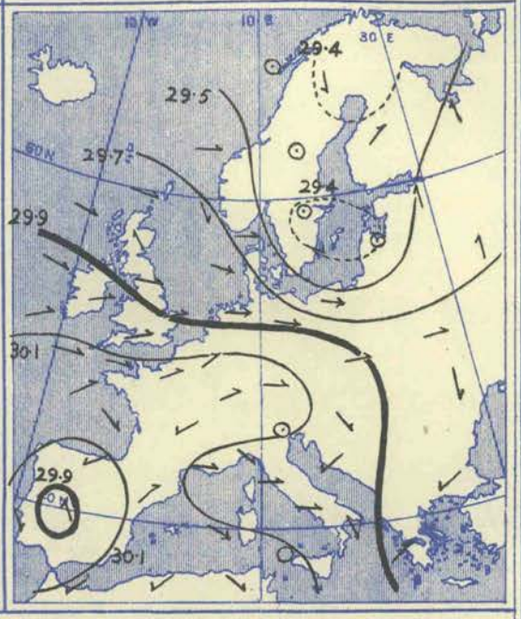
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning generally dull, overcast, and unsettled over the British Isles, with fog at several places on the western coasts, and showers in the Midlands and in Wales. Fair or fine, as a rule, over Algeria and the southern regions of Europe, from Portugal to Russia; mostly overcast further north, with fog at Christiansund, St. Petersburg, and Vienna, rain along the shores of the Baltic and at scattered stations elsewhere. No important changes during the day, showers falling at most of the home stations and at many of the northern Continental ones. Fog spreading eastward along the north coast of France.

Temperature risen over nearly the whole of our Islands, and in an area extending thence across France and the Netherlands into south Germany and eastward into central Russia; fallen in most other regions. Morning readings highest, (1) 84° at Athens, 77° at Palermo and Palma; (2) 66° at Moscow, and 65° at Stockholm; and (3) 62° at Dungeness and Jersey, but only 49° at Sumburgh Head and Wick. During the day rising to 71° at Spurn Head and in London, and above 80° only in the Peninsula and Mediterranean countries. Below 60° in the north of Scotland and of Ireland.

Wind variable, mainly Easterly, over the more southern parts of Europe and in north Africa, elsewhere a well-marked cyclonic circulation round a centre of low pressure situated on the Gulf of Bothnia, a strong breeze blowing on the eastern coasts of the North Sea and in Bavaria, a fresh breeze in north Germany, moderate to very light everywhere else. Other than a freshening of the Westerly wind at various stations on our own coasts and an Easterly gale at San Fernando, no important alteration occurring during the day.

Barometer highest, 30·2 ins. and upwards in an anticyclone extending from the Atlantic across the Bay of Biscay and northern Spain as far as Bavaria. Lowest, 29·4 ins. and under in a depression over the north-east of Sweden and the Gulf of Bothnia, and below 30·1 ins. in another approaching the south of Portugal. The northern disturbance subsequently forming two separate centres, and the one in the far south-west moving north-eastward into central Spain, with the barometer below 29·9 ins. A detached portion of the anticyclone moving eastward for central Europe.

IV.—GENERAL NOTES, etc.

At the commencement of the week the barometer was highest over the western parts of the Spanish Peninsula, a ridge of relatively high pressure over the northern and central parts of the Continent separating a shallow cyclonic system over our own north-western districts from a more clearly defined depression over central Russia. The latter disturbance afterwards filled up, but over western Europe the weather was influenced by a couple of well marked and rather deep depressions which appeared in quick succession off our south-west coasts, and which afterwards travelled north-eastwards across England. The progress of each disturbance was attended by heavy falls of rain, with fresh or strong Southerly to Westerly winds over France and the south of our Islands, but with light Easterly (South-Easterly to North-Easterly) winds on our northern coasts. On reaching the North Sea the two depressions coalesced, the combined area moving on to the south of Norway. A new high pressure system had in the meantime formed over Russia, and the further north-easterly movement of the disturbance was consequently arrested, the centre remaining almost motionless over or in the immediate neighbourhood of the Norwegian coasts until very nearly the end of the week, when it resumed its north-easterly progress. In its rear several shallow secondaries passed south-eastwards over the United Kingdom, the wind being fresh from the Westward or North-Westward, and the weather cool and showery.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 176.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	9·2	-20·8	8	- 18
STRATHPEFFER SPA	—	—	—	—
EDINBURGH	19·7	-13·0	18	- 11
COCKLE PARK	24·8	—	22	—
NEWCASTLE-ON-TYNE	22·5	—	20	—
YORK	—	—	—	—
CROMER	20·8	—	19	—
LOWESTOFT	26·8	—	25	—
DUNMOW	27·0	—	25	—
SHEFFIELD	35·2	—	32	—
WORKSOP	25·8	- 9·6	24	- 9
THURCASTON	20·2	-18·8	19	- 17
TUNBRIDGE WELLS	22·7	—	21	—
MARGATE	22·3	-21·9	21	- 21
BROADSTAIRS	24·6	—	23	—
RAMSGATE	—	—	—	—
EASTBOURNE	24·7	-25·4	23	- 24
BRIGHTON	22·3	-28·8	21	- 27
WORTHING	23·9	—	22	—
BOGNOR †	26·1†	—	24†	—
WATERGATE PARK	22·3	—	21	—
WESTBOURNE †	24·6†	-24·7	23†	- 23
VENTNOR HOSPITAL	23·7	-24·0	22	- 22
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	31·9	- 9·6	30	- 9
SOUTHPORT	36·1	—	33	—
RHYL	—	—	—	—
ABERDOVEY †	33·2†	—	31†	—
TENBY	37·0	- 8·4	34	- 8
TORQUAY	44·3	- 4·2	41	- 4
NEWQUAY	39·2	- 8·4	37	- 8
GUERNSEY †	44·3†	-12·1	42†	- 11

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX. - No. 21 - p. 122	Blackpool	—	—	—	45·3	56·4	+ 3·7	101	0	—	—	—	—	—	—	—
" - " 23 - p. 134	Birr Castle	—	—	—	—	—	—	—	—	—	0·05	- 0·51	—	—	—	—
" - " 24 - p. 146	"	—	—	—	—	—	—	—	—	—	1·26	+ 0·68	—	—	—	—
" - " 29 - p. 170	Glencarron	—	—	—	—	—	—	—	—	3	0·40	- 1·00	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 31.] *Third Series.* WEEK ENDING SATURDAY, AUGUST 8TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

DISTRICTS. (See p. 182.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	66	44	59·6	48·8	53·9	1 below	83	− 6	0	0	1124*	− 82	491	− 47
1. SCOTLAND, EAST	69	45	63·3	49·9	56·2	0 (average)	99	− 4	0	0	1329	−134	502	− 81
2. ENGLAND, N.E.	75	46	66·4	51·8	58·7	0 (average)	117	+ 2	0	0	1538	− 16	342	−137
3. ENGLAND, EAST	77	43	69·1	51·1	59·6	1 below	123	− 4	0	0	1827	− 4	322	−203
4. MIDLAND COUNTIES	76	39	67·9	50·5	58·7	1 below	117	− 6	0	0	1735	−109	355	−180
5. ENGLAND, SOUTH	79	38	68·1	52·6	59·9	1 below	125	−11	0	0	1929	− 65	208	−179
Principal Grazing Districts. 6. SCOTLAND, WEST	68	44	63·0	51·1	56·7	0 (average)	103	− 3	0	0	1503	− 52	317	− 96
7. ENGLAND, N.W.	75	45	65·1	53·4	58·9	0 (average)	118	+ 1	0	0	1661	− 21	259	−129
8. ENGLAND, S.W.	75	43	66·1	53·6	59·5	1 below	123	− 1	0	0	1896	+ 24	162	−138
9. IRELAND, NORTH	67	38	62·2	51·7	56·7	1 below	103	− 6	0	0	1543*	−111	236	− 61
10. IRELAND, SOUTH	70	41	64·7	53·1	58·6	1 below	116	− 2	0	0	1887	− 4	183	− 67
— CHANNEL ISLANDS	77	49	67·0	56·7	61·6	0 (average)	137	0	0	0	2175	+ 62	49	− 68

Rainfall.

DISTRICTS. (See p. 182.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.
		10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	7	16	7 more	150	+21	39·0	+13·2
1. SCOTLAND, EAST	7	9	2 more	130	+18	23·1	+ 6·3
2. ENGLAND, N.E.	3	3	3 less	106	+ 3	15·5	+ 1·9
3. ENGLAND, EAST	1	4	2 less	94	−10	16·3	+ 3·2
4. MIDLAND COUNTIES	2	3	3 less	103	+ 3	18·0	+ 2·8
5. ENGLAND, SOUTH	2	2	4 less	106	+ 9	18·9	+ 4·2
Principal Grazing Districts. 6. SCOTLAND, WEST	6	17	8 more	138	+22	35·9	+ 9·7
7. ENGLAND, N.W.	4	6	1 less	124	+16	21·8	+ 4·1
8. ENGLAND, S.W.	2	3	5 less	119	+ 9	24·6	+ 4·4
9. IRELAND, NORTH	6	12	3 more	151	+20	25·2	+ 6·0
10. IRELAND, SOUTH	5	4	4 less	136	+18	27·4	+ 5·5
— CHANNEL ISLANDS	2	1	4 less	125	+13	17·8	+ 1·4

Bright Sunshine.

DISTRICTS. (See p. 182.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	21	− 5	19	− 5	703*	− 99	24	− 3
1. SCOTLAND, EAST	41	+ 7	38	+ 6	776	−126	27	− 4
2. ENGLAND, N.E.	53	+21	49	+19	864	− 75	30	− 3
3. ENGLAND, EAST	52	+ 7	49	+ 7	1000	− 78	35	− 3
4. MIDLAND COUNTIES	48	+ 7	45	+ 6	868	− 65	30	− 2
5. ENGLAND, SOUTH	56	+11	53	+10	1068	− 14	37	− 1
Principal Grazing Districts. 6. SCOTLAND, WEST	43	+ 8	39	+ 7	872	− 74	30	− 3
7. ENGLAND, N.W.	48	+13	45	+12	959	+ 21	33	+ 1
8. ENGLAND, S.W.	53	+ 7	51	+ 7	1038	− 85	36	− 3
9. IRELAND, NORTH	40	+11	37	+10	770	−106	27	− 4
10. IRELAND, SOUTH	38	+ 4	36	+ 3	864	−122	30	− 4
— CHANNEL ISLANDS	58	+ 4	56	+ 4	1232	− 51	43	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather. Very unsettled, showery conditions prevailed generally throughout the British Isles during the first half of the period, and continued to a more or less extent over the northern and western districts to the close, but over the southern and eastern parts of England the weather was much finer and drier after the middle of the week. On the western and southern coasts a good deal of mist or fog was reported in the earlier part. Thunder occurred at Marchmont on Thursday, and at Markree Castle and Plymouth on Saturday. On Wednesday a large meteor was observed at Scarborough falling nearly vertically.

Temperature equalled the average in Scotland E. and W., England N.E. and N.W., and in the Channel Islands, all other districts returning a deficit of 1°. The highest readings were observed on various days, the maximum of 79° in London and 77° at Cambridge and Jersey occurring on Saturday. Many of the northern maxima were below 60°. The lowest night values were recorded in the inland parts of England and Ireland during the fine spell of the second half of the week, 38° in the shade being registered at Swarraton and Markree Castle, and 39° at Cirencester.

Rainfall, although frequent, exceeded the average only over Scotland and the north of Ireland. In the Channel Islands the amount was very trifling, and in several parts of England and Ireland the aggregates were from one-third to one-half the average. At Blackpool 1·1 ins. fell on Sunday, and at Fort William 1·2 ins. on Saturday, but, as a rule, the individual falls were small.

Bright Sunshine was deficient in the north of Scotland, but over the rest of the country there was an excess, as much as 10 to 19 per cent. in some districts.

Barometer and Wind. The distribution of pressure was of an unstable character, generally high over the Bay of Biscay region and thence eastward to central Europe, while disturbances and their secondaries affected various parts of our Islands. In one of these on Saturday the barometer was as low as 29·2 ins. in the extreme north of Scotland. On Saturday the wind was Southerly, but on other days North-Westerly to South-Westerly breezes prevailed extensively, frequently fresh or strong in force in many places, and on as many as four days moderate or fresh gales were experienced at some of our western and northern stations.

307 | 70 219 | 90 Wy. & S. Ltd. 12 | 02

II.—DATA from which the SUMMARY on page 181 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	58	45	54·6	46·7	50·4	− 2·5	59	0	6	0·46	− 0·20	*	*	*	*
	Stornoway	62	44	59·9	47·9	53·5	− 0·8	81	0	7	1·47	+ 0·70	33·4	+ 2·9	30	+ 3
	Wick	62	44	59·3	47·6	53·1	− 1·6	78	0	7	1·36	+ 0·79	*	*	*	*
	Lairg Ş	66	47	63·1	48·9	55·6	+ 1·1	95	0	7	1·37	+ 0·74	*	*	*	*
	Glencarron Ş	66	47	58·9	48·6	53·4	− 1·1	80	0	7	2·20	+ 0·75	*	*	*	*
	Fort Augustus Ş	66	49	61·2	50·3	55·4	− 1·1	94	0	7	1·10	+ 0·39	16·6	− 4·0	15	− 4
	Fort William	63	50	60·5	51·8	55·9	− 1·0	97	0	7	3·09	+ 1·84	9·4	− 15·6	9	− 14
1. SCOTLAND, E.	Nairn	66	47	63·7	49·7	56·3	− 0·3	100	0	7	0·38	− 0·22	*	*	*	*
	Aberdeen	64	45	62·7	49·7	55·8	− 0·6	97	0	7	1·47	+ 0·81	28·0	− 7·6	26	− 7
	Braemar Ş	63	45	59·5	47·9	53·4	− 0·4	80	0	7	0·92	+ 0·15	*	*	*	*
	Ochtertyre Ş	66	46	64·3	50·3	56·9	− 0·4	104	0	6	1·29	+ 0·48	*	*	*	*
	Leith Ş	69	50	66·1	52·0	58·6	+ 0·3	116	0	7	0·66	+ 0·07	*	*	*	*
	Marchmont Ş	65	46	63·6	49·6	56·2	0·0	99	0	5	0·66	− 0·11	52·3	+ 16·2	48	+ 15
2. ENGLAND, N.E.	Alnwick Castle	69	48	65·6	51·8	58·3	+ 1·4	114	0	5	0·63	− 0·05	*	*	*	*
	Durham	68	48	64·9	51·7	57·9	− 0·4	111	0	3	0·29	− 0·35	55·5	+ 20·9	51	+ 19
	Shields	70	46	66·1	51·3	58·3	+ 0·9	114	0	5	0·38	− 0·25	*	*	*	*
	Scarborough Ṁ	70	47	66·6	50·4	58·0	− 0·4	112	0	3	0·20	− 0·41	48·5	—	45	—
	Spurn Head	72	52	67·4	54·0	60·3	+ 0·9	128	0	1	0·15	− 0·25	*	*	*	*
	Fulbeck (Lincolnshire)	75	47	68·0	51·3	59·2	− 0·2	120	0	1	0·20	− 0·33	50·3	—	48	—
3. ENGLAND, E.	Hillington Ṁ	75	43	69·7	49·5	59·0	− 1·1	119	0	3	0·58	− 0·06	49·2	+ 7·4	46	+ 7
	Yarmouth	70	47	66·4	51·7	58·6	− 1·5	116	0	2	0·46	− 0·07	*	*	*	*
	Geldeston	73	45	69·1	50·2	59·1	− 0·9	120	0	1	0·41	− 0·06	49·3	+ 4·6	47	+ 4
	Cambridge	77	45	70·6	49·6	59·5	− 1·6	123	0	1	0·46	− 0·08	48·3	+ 4·9	46	+ 5
	Felixstowe	72	47	70·7	53·1	61·4	+ 0·9	136	0	1	0·01	—	51·9†	—	49†	—
	Rothamsted	74	45	67·9	50·3	58·6	− 1·2	116	0	1	0·39	− 0·17	55·3	+ 11·1	53	+ 11
	Shoeburyness	74	50	69·1	53·3	60·7	− 0·6	131	0	1	0·23	− 0·17	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	67	46	65·0	51·2	57·7	0·0	110	0	4	0·26	− 0·36	56·3	—	52	—
	Bawtry (Hesley Hall)	75	46	69·3	52·6	60·5	+ 0·9	130	0	1	0·23	− 0·30	*	*	*	*
	Nottingham	73	43	67·6	49·7	58·1	− 2·3	113	0	1	0·29	− 0·28	47·2	—	45	—
	Loughborough	75	44	69·5	51·5	60·0	− 0·8	126	0	3	0·25	− 0·29	*	*	*	*
	Colly Weston (Stamford)	76	45	70·3	49·1	59·1	− 1·7	120	0	3	0·34	− 0·21	*	*	*	*
	Cheadle Ṁ	71	46	66·0	50·0	57·5	− 0·1	109	0	2	0·24	− 0·52	*	*	*	*
	Birmingham (Edgbaston)	73	48	67·2	51·6	58·9	− 0·4	118	0	2	0·58	− 0·03	46·3	—	44	—
	Churchstoke Ṁ	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ṁ	74	41	67·9	50·1	58·5	− 1·6	116	0	2	0·29	− 0·25	*	*	*	*
	Cirencester	74	39	67·4	47·4	56·8	− 2·0	104	0	1	0·25	− 0·42	46·0	+ 3·6	44	+ 3
	Oxford	74	47	68·4	51·9	59·7	− 1·0	124	0	1	0·30	− 0·24	45·2	+ 2·4	43	+ 2
5. ENGLAND, S.	London	79	46	71·4	51·9	61·1	− 1·1	134	0	3	0·32	− 0·18	50·0↓	+ 10·0↓	48↓	+ 10↓
	Swarraton (Alresford) Ṁ	73	38	68·1	49·1	58·0	− 0·9	112	0	2	0·16	− 0·45	*	*	*	*
	Dungeness	74	47	68·3	53·6	60·5	− 1·0	130	0	2	0·13	− 0·26	52·5	--	50	—
	Hastings (St. Leonards)	71	50	66·7	53·3	59·6	− 1·6	123	0	2	0·17	− 0·37	59·1	+ 9·7	56	+ 9
	Southampton	74	47	71·4	52·9	61·6	− 0·5	137	0	1	0·11	− 0·47	61·6	+ 13·9	59	+ 13
	Portland Bill	67	52	64·7	56·3	60·3	− 0·2	128	0	2	0·13	—	*	*	*	*
	Shaftesbury Ṁ	72	47	66·4	51·3	58·4	− 1·0	115	0	1	0·14	− 0·50	*	*		*
6. SCOTLAND, W.	Laudale (Loch Sunart)	65	50	61·7	51·9	56·5	− 0·6	102	0	7	3·78	+ 2·57	*	*	*	*
	Glasgow	63	49	61·3	51·7	56·2	− 0·6	99	0	7	1·36	+ 0·50	37·2	+ 7·2	34	+ 7
	Cally Ş	68	46	66·0	49·4	57·2	+ 0·3	106	0	5	1·35	+ 0·37	*	*	*	*
	Aspatria	68	49	63·8	52·1	57·6	+ 0·1	109	0	5	1·14	—	41·7	—	39	—
	Douglas (Isle of Man)	64	44	62·3	50·6	56·1	− 1·0	99	0	6	1·00	+ 0·21	48·9	+ 8·2	45	+ 8
7. ENGLAND, N.W.	Newton Rigg	67	45	63·7	50·4	56·7	+ 0·1	103	0	7	0·71	—	49·1	—	46	—
	Stonyhurst	69	46	63·1	52·4	57·4	− 0·7	108	0	4	0·75	− 0·33	50·9	+ 15·3	48	+ 14
	Blackpool Ṁ	71	54	64·6	55·1	59·6	+ 0·3	123	0	5	1·42	+ 0·68	49·1	+ 12·0	46	+ 11
	Manchester (Prestwich)	70	46	65·6	51·6	58·2	− 0·2	113	0	4	0·68	− 0·16	39·8	—	37	—
	Liverpool Obsy. (Bidston)	72	52	65·7	54·1	59·6	− 0·1	123	0	4	0·51	− 0·14	49·1	—	46	—
	Chester (Hawarden Bridge)	75	53	68·5	55·5	61·6	+ 1·6	137	0	2	0·19	—	*	*	*	*
	Llandudno Ṁ	71	51	66·3	55·0	60·3	+ 0·2	128	0	2	0·15	− 0·46	49·3	+ 11·1	46	+ 10
	Holyhead	66	51	63·6	53·1	58·0	− 0·9	112	0	5	0·63	− 0·01	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	62	55	61·1	56·7	58·8	− 0·3	118	0	3	0·36	− 0·26	39·7	− 5·0	38	− 5
	Clifton	75	50	68·2	54·4	60·9	+ 0·2	132	0	2	0·29	− 0·45	*	*	*	*
	Bath	69	45	67·3	52·7	59·6	− 1·4	123	0	1	0·09	− 0·53	54·5	—	52	—
	Arlington (N. Devon)	71	43	65·1	51·3	57·8	− 0·7	111	0	3	0·58	− 0·48	*	*	*	*
	Cullompton Ṁ	72	44	69·1	50·2	59·1	− 1·3	120	0	1	0·10	− 0·55	53·2	+ 11·1	51	+ 11
	Falmouth	68	53	66·0	55·1	60·2	+ 0·1	127	0	4	0·23	− 0·53	60·3	+ 11·2	58	+ 11
	Plymouth	67	50	66·2	54·7	60·1	− 0·9	127	0	2	0·15	− 0·50	55·0	+ 9·6	53	+ 9
9. IRELAND, N.	Malin Head	64	51	60·1	53·3	56·5	− 1·1	102	0	7	1·37	+ 0·67	*	*	*	*
	Edenfel (Omagh)	66	46	61·4	50·9	55·8	− 1·0	97	0	7	1·98	+ 1·13	*	*	*	*
	Blacksod Point	62	47	61·6	53·6	57·4	− 0·4	108	0	6	1·18	+ 0·20	*	*	*	*
	Markree Castle	66	38	62·9	50·0	56·1	− 0·7	99	0	5	0·77	− 0·13	30·8	+ 1·0	29	+ 1
	Armagh	67	47	64·3	51·0	57·3	− 0·2	107	0	4	0·74	0·00	49·5	+ 20·0	46	+ 19
	Donaghadee	65	47	62·7	51·6	56·8	− 0·5	104	0	7	0·86	+ 0·14	*	*	*	*
10. IRELAND, S.	Dublin	70	48	66·5	53·7	59·7	+ 0·3	124	0	5	0·19	− 0·48	48·3	+ 11·1	45	+ 10
	Birr Castle	66	43	64·3	50·7	57·1	− 1·4	106	0	6	0·52	− 0·29	38·9	+ 7·2	37	+ 7
	Kilkenny	67	41	64·1	51·9	57·6	− 1·3	109	0	5	0·37	− 0·36	*	*	*	*
	Waterford	69	45	64·9	53·0	58·6	− 0·3	116	0	2	0·26	− 0·63	*	*	*	*
	Roche's Point	67	51	64·1	54·6	59·1	− 0·3	120	0	4	0·32	− 0·50	*	*	*	*
	Valencia	64	49	62·4	54·6	58·3	− 0·7	114	0	6	0·98	− 0·07	27·2	− 7·6	26	− 7
	Killarney	69	46	66·3	53·5	59·5	+ 0·4	123	0	5	0·24	− 0·74	*	*	*	*
	Foynes	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	68	56	65·9	56·7	61·0	+ 0·3	133	0	1	0·11	− 0·43	45·1	− 6·5	43	− 6
	Jersey	77	49	68·1	56·7	62·1	− 0·6	141	0	3	0·14	− 0·39	63·7	+ 8·3	62	+ 8

Stations Marked Ṁ are in connection with the Royal Meteorological Society, and those marked Ş with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

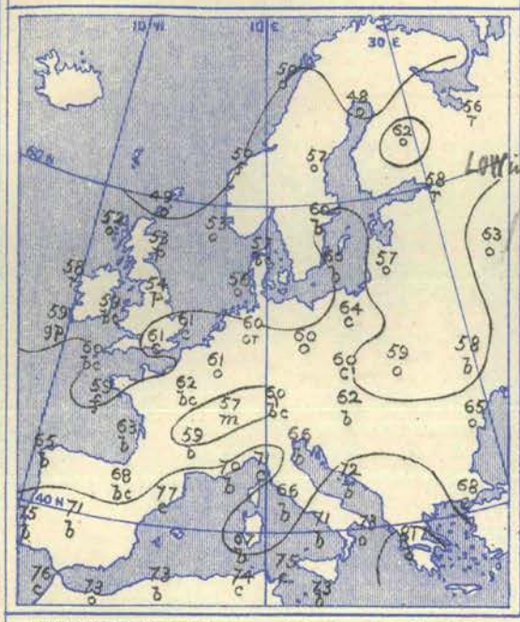
↓ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 2nd August, 1903.

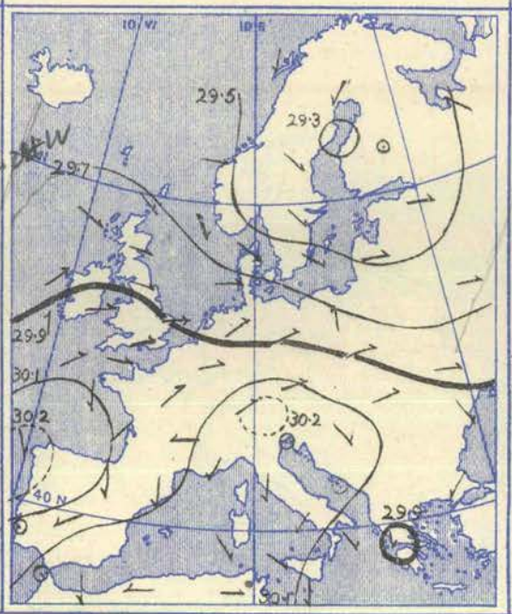
Temperature and Weather.

8 a.m.

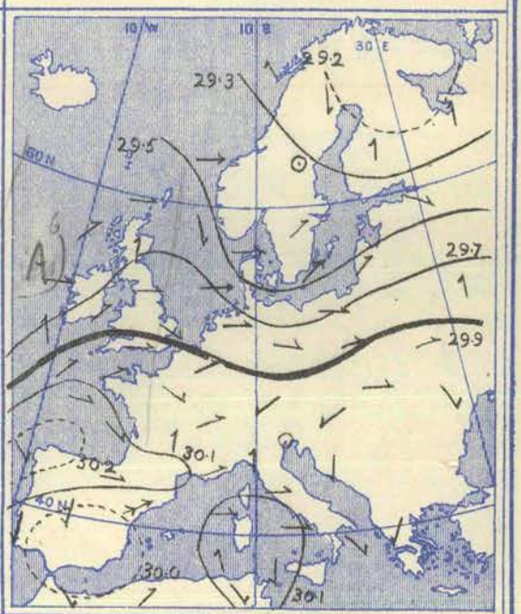


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fair in our Islands and on the Continent generally, but rain or passing showers reported at some stations in Ireland, on the north-east coast of Great Britain, as well as in the north of Russia. Rain later over nearly the whole of our Islands and the neighbouring Continental countries—as much as 0·94 in. measured at Christiansund, and rather more than half an inch at Blacksod Point and Holyhead.

Temperature changing little over our Islands, but risen somewhat over Germany and France; changed irregularly elsewhere. Morning readings highest, 81° at Patras, 77° at Barcelona, and above 70° over southern Europe generally, above 60° over France and Germany. Highest in our Islands, 61° over the south-eastern counties, and 60° at Roche's Point and Scilly. Lowest, 48° at Haparanda, 49° at Sumburgh Head, and only slightly exceeding 50° in the north of Scotland. Rising during day to 69° in London and at Margate, but failing to reach 65° in many parts of our Islands. Much higher values on the Continent, readings exceeding 80° reported from central Europe, reaching 90° at several Algerian stations and in Greece, and touching 99° at Madrid.

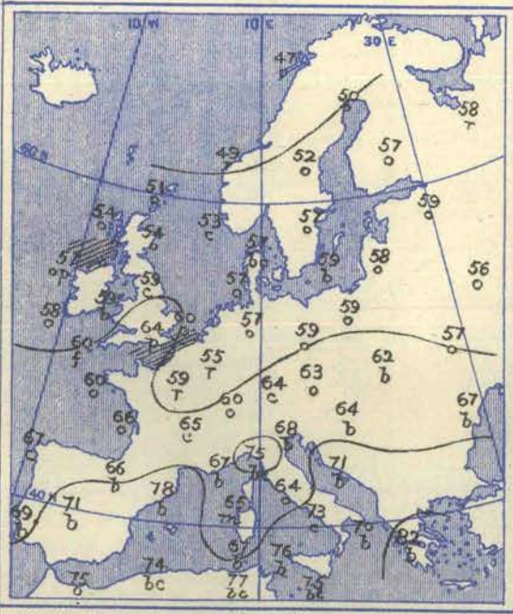
Wind light to moderate from West or North-West over Great Britain and Scandinavia, South-West in Ireland, and also over Austria and Germany, chiefly Northerly in France, but light and variable over southern Europe and the Mediterranean. Becoming more Southerly over our Islands later, and blowing freshly at several of our western stations; no change of importance elsewhere.

Barometer falling over our Islands and the adjacent parts of the Continent, rising in most other places. Readings in morning highest, 30·2 ins. and upwards over the north-western part of the Spanish Peninsula, and also in a small system over south Germany. Lowest, 29·4 ins. and less over the Baltic Provinces, and 29·9 ins. and less in a shallow disturbance over southern Greece. New depression appearing off our north-west coasts later, and large but shallow system forming over the Iberian Peninsula. Northern disturbance passing slowly away over the White Sea.

Monday, 3rd August, 1903.

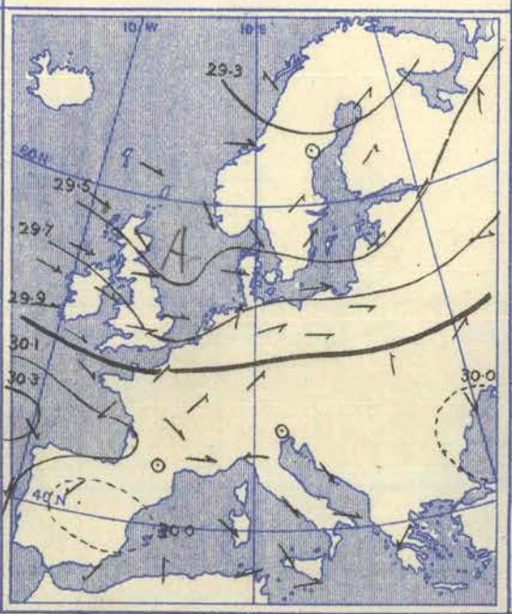
Temperature and Weather.

8 a.m.

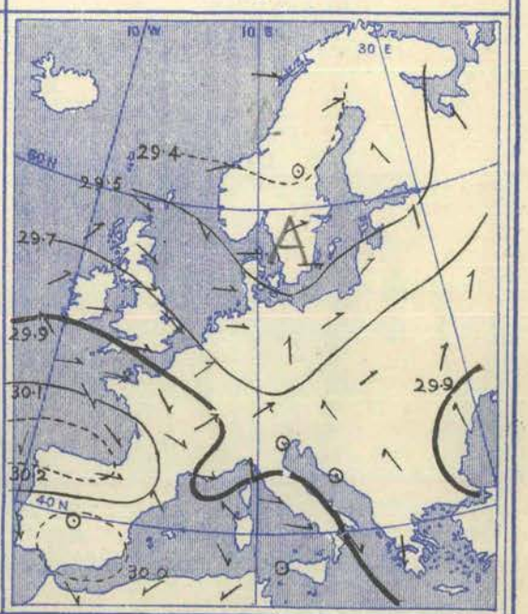


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning very changeable over our Islands and the neighbouring parts of the Continent, showery in places, and occasionally foggy at the mouth of the English Channel and along the French side of the Channel, dull over the central European countries, with rain at several German and Austrian stations, but fine and bright over the Mediterranean and southern Europe generally. Rain over our Islands and also in France and Germany later, the largest amounts measured being 0·7 in. at Cuxhaven and 0·87 in. at Frankfurt.

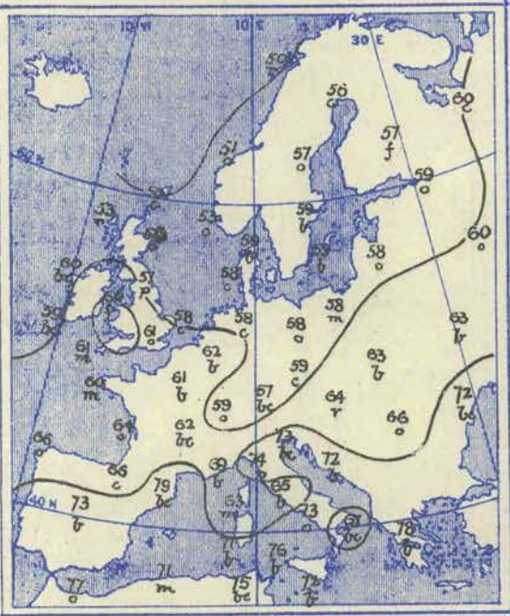
Temperature still changing irregularly, but inclined to rise over our Islands and in the west of France, colder over Germany and the Netherlands, but risen slightly in most other places. Morning readings highest, 82° at Patras and 78° at Barcelona, above 70° over southern Europe generally. Highest in our Islands, 64° in London and 63° at Leith and Bath. Lowest, 47° at Bodö, 49° at Christiansund, 50° at Haparanda, 51° at Sumburgh Head, and 53° at Wick. Rising during day to 74° at Dungeness and 71° in London, exceeding 70° at many of the French and German stations, rising to above 80° in Italy and Algeria, and touching 90° at Perpignan, 91° at Cagliari, 94° at Nemours, and 100° at Barcelona.

Wind from between North-West and West over our Islands, and blowing freshly in many places. Westerly or South-Westerly over the Continent generally, but chiefly light from some northerly point over the Mediterranean and southern Europe. No material change later, but wind backing to South-Eastward in the south-west of Ireland during the afternoon.

Barometer falling in most places. Morning readings highest, 30·2 ins. and upwards over the north-western part of the Spanish Peninsula, and 30·0 ins. over southern Russia and the Black Sea. Lowest, 29·3 ins. and less over the northern part of Scandinavia, below 29·5 ins. in a shallow secondary disturbance over the North Sea, and 30·0 ins. and less in another system over central Spain and the western part of the Mediterranean. No change of importance later, but depression over the North Sea travelling in an Easterly direction to Germany.

Tuesday, 4th August, 1903.

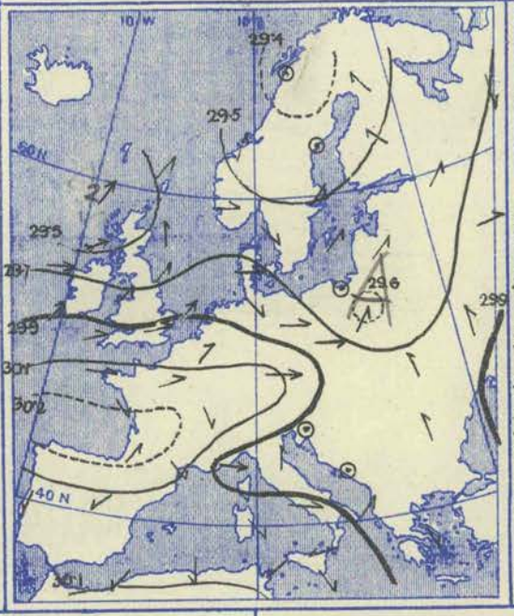
Temperature and Weather. 8 a.m.

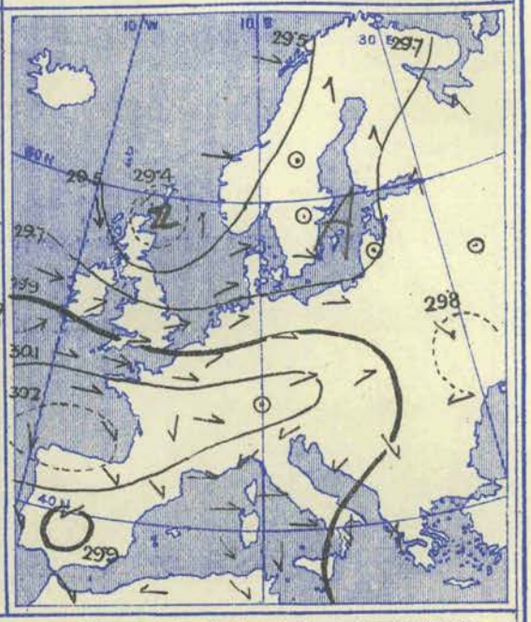


Weather in morning fair to fine in most parts of Ireland, generally dull and overcast over Britain, with mist or fog along the south-western coasts, from Portland to Holyhead, and rain at some places in the north and north-east. Dull in Norway, with rain at Bodö, and misty to foggy on the Brittany coast; fine in other continental districts. During the day showers falling in many parts of our Islands, 0·7 in. of rain at Wick. Some rain also in Sweden, eastern Germany and Holland, dry in most other parts of the Continent.

Temperature fallen slightly on the east coast of Britain and in the south of England, also in central Europe and locally on the Bay of Biscay and Mediterranean coasts. Readings at 8 a.m. highest, 79° at Barcelona, 78° at Athens, and 63° at Roche's Point and Hangö. Lowest, 50° at Breslau, 52° at Wick, 51° at Christiansund, and 50° at Sumburgh Head and Bodö. Rising in the course of the day to 53° at Sumburgh Head, 58° at Wick, 73° at Brighton, and 74° at Dungeness; above 80° at many southern stations, to 92° at Palermo, 93° at Tunis, 100° at Madrid, and 102° at Aumale.

Barometer and Wind. 8 a.m. and 6 p.m.



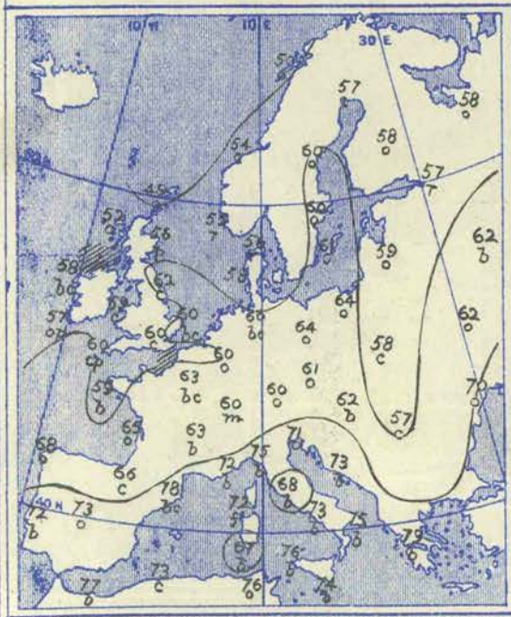


Wind over the greater part of our area Westerly to Southerly, a fresh gale at Malin Head, a moderate gale at Blacksod, Parsonstown, Pembroke, and Munich, fresh in force at several stations in our Islands and locally on the Continent; very light in Scotland, Scandinavia, and eastern Europe. Towards evening increasing to a moderate gale on the Straits of Dover, falling very light over central Europe, continuing rather brisk in various parts of the British Isles.

Barometer at 8 a.m. highest, 30·2 ins. and upwards, at the centre of an anticyclone situated over the south-west of France and north of Spain. Lowest, 29·4 ins. and under, in a depression centred over the northern part of Scandinavia, and below 29·5 ins. over the north and west of Scotland, in a new disturbance approaching from the westward. The anticyclone remaining stationary through the day, the Scandinavian depression disappearing, then moving east across the north of Scotland, and a new one forming over central Spain, barometer below 29·9 ins.

Wednesday, 5th August, 1903.

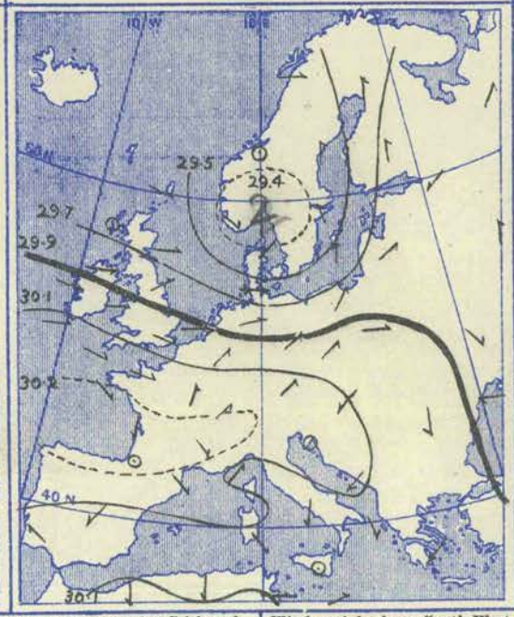
Temperature and Weather. 8 a.m.

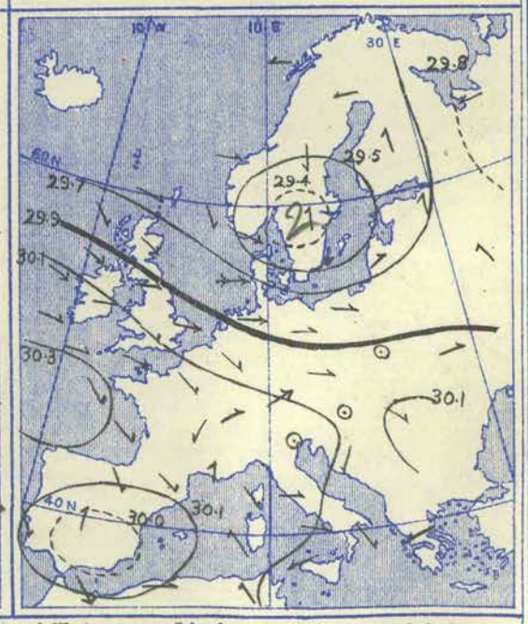


Weather in morning fair and dry as a whole, but slight showers reported at a few Irish and Scotch stations, and steady rain at Skudesnaes and The Scaw. Rain later in Ireland and Scotland, as well as over Scandinavia, Germany, and the Baltic Provinces, amounts not large generally, but 0·6 in. measured at Aberdeen, 0·87 in. at Hernösand, and 1·18 ins. at Hangö. Thunderstorm during day at Fanö and Cuxhaven, but accompanying rainfall not heavy.

Temperature fallen somewhat over our Islands, but risen a little over France, Germany, and the greater part of southern Europe, changed irregularly elsewhere. Morning readings highest, 79° at Patras, 78° at Barcelona, 77° at Athens, and Cape Sicié, above 70° at many southern European stations, and above 60° over central Europe and the Baltic. Highest in our Islands, 62° at Shields and in London, and 61° at Leith and Bath. Lowest, 49° at Sumburgh Head, 50° at Bodö, and 52° at Stornoway and Wick. Rising during day to 68° at Yarmouth and in London, to above 70° over France, Austria, and Germany, exceeding 80° at many southern European stations, and reaching 94° at Perpignan, 95° at Cette, 102° at Madrid, and 104° at Aumale and Biskra.

Barometer and Wind. 8 a.m. and 6 p.m.



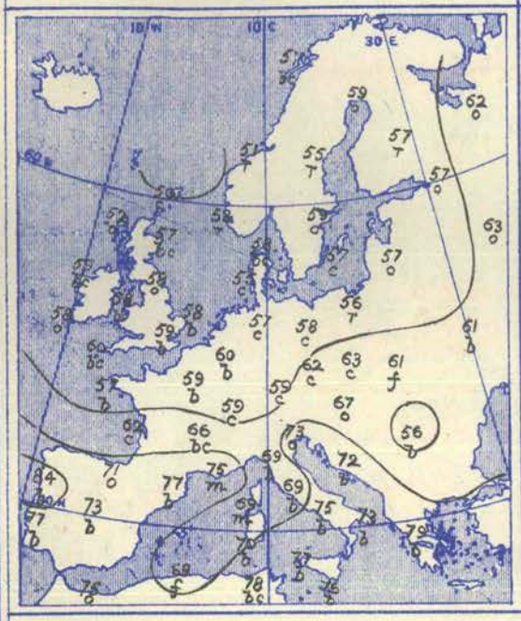


Wind, mainly from South-West and West over our Islands, and moderate or fresh in force, reaching the force of a moderate gale at Malin Head. A complete cyclonic circulation shown over Scandinavia, Denmark, and the Baltic, the Westerly wind blowing a fresh gale at Fanö. Light variable airs prevailing elsewhere. No change of importance later, but another cyclonic circulation appearing over Spain and the western part of the Mediterranean.

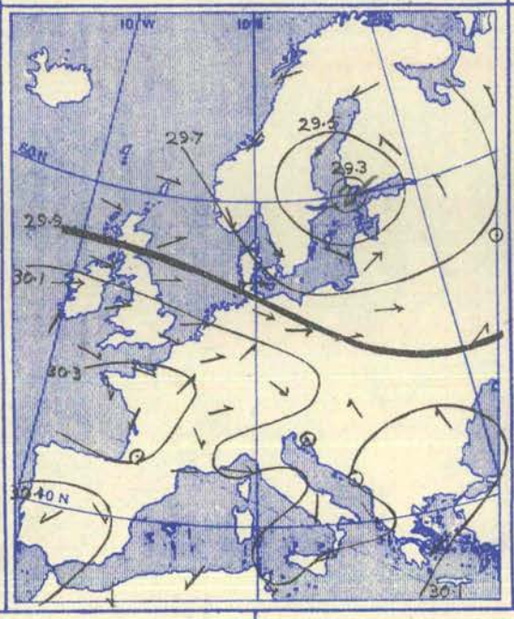
Barometer rising over our Islands and on the Continent generally, but falling to the eastward of the North Sea. Morning readings highest, 30·2 ins. and upwards in an anticyclone extending from the Bay of Biscay to the western and southern parts of France, 30·1 ins. and upwards over northern Africa, and above 29·9 ins. over central Russia. Lowest, 29·3 ins. and less in a well marked disturbance over the south of Norway. Cyclonic disturbance moving slowly to the eastward during day, and a new low pressure system appearing over Spain, Morocco, and the western part of the Mediterranean.

Thursday, 6th August, 1903.

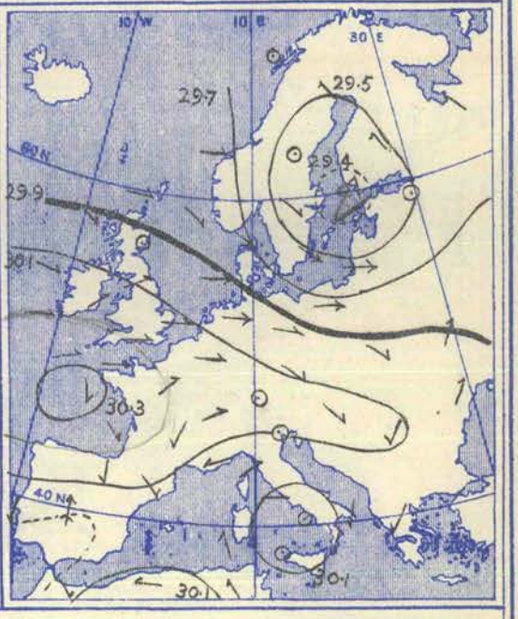
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine over western and southern Europe generally, but showery in the north of Ireland and the south of Scotland. Dull in the northern and central countries with rain in many places. Rain falling later over the northern parts of the United Kingdom and Continent generally, and a thunderstorm occurring at Cuxhaven.

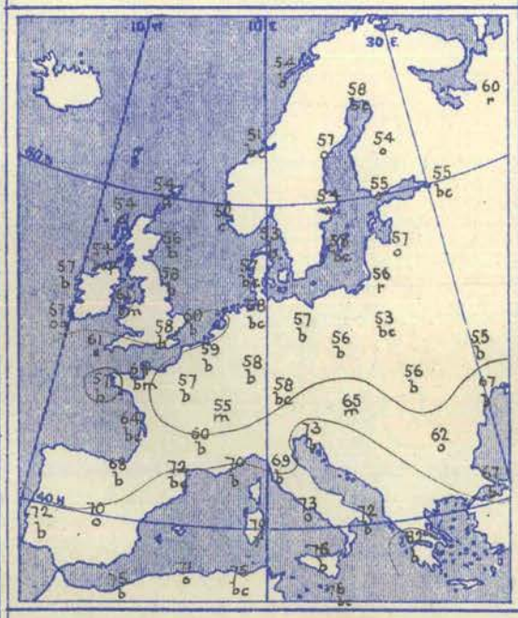
Temperature falling in most places. Morning readings highest, 84° at Oporto, 81° at Aumale, 79° at Patras and 78° at La Calle; above 70° in most parts of southern Europe. Lowest, 50° at Sumburgh Head, 51° at Christiansund, and 52° at Stornoway; below 55° in the west of Norway and on our own extreme north and north-west coasts generally. Rising during day to 65° and upwards in most parts of England and the south of Ireland, and to 69° in London; exceeding 85° over southern Europe, and reaching 95° at Cette and 100° at Cagliari and Madrid.

Wind Westerly over the United Kingdom, the Netherlands, Denmark, and Germany; light to fresh in force generally, but strong in the north of Ireland and blowing a gale at Fanö. South-Westerly in the Baltic, South-Easterly in Finland, and Easterly or North-Easterly in the northern parts of Scandinavia. Light and variable over the Spanish Peninsula and the south of France, Northerly over Greece and southern Italy. No important change occurring during day.

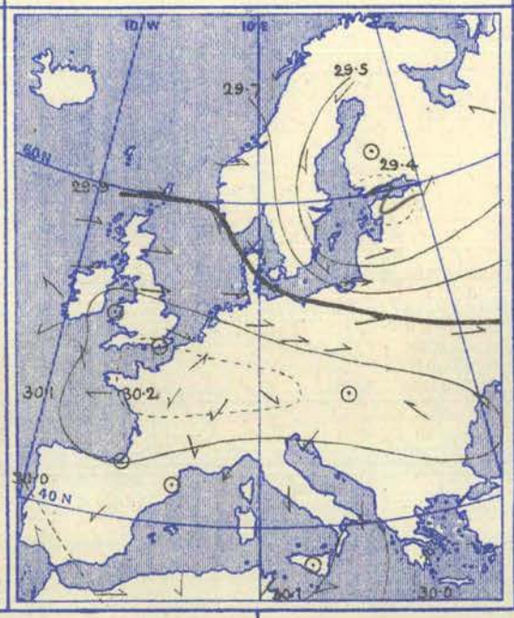
Barometer highest, 30·3 ins. and upwards in an anticyclone lying over the Bay of Biscay and the west of France. Lowest, 29·3 ins. and less in a well-marked depression with its centre over the southern part of the Gulf of Bothnia. No decided change occurring later, but anticyclone spreading slowly northwards and low-pressure system moving very slowly south-eastwards.

Friday, 7th August, 1903.

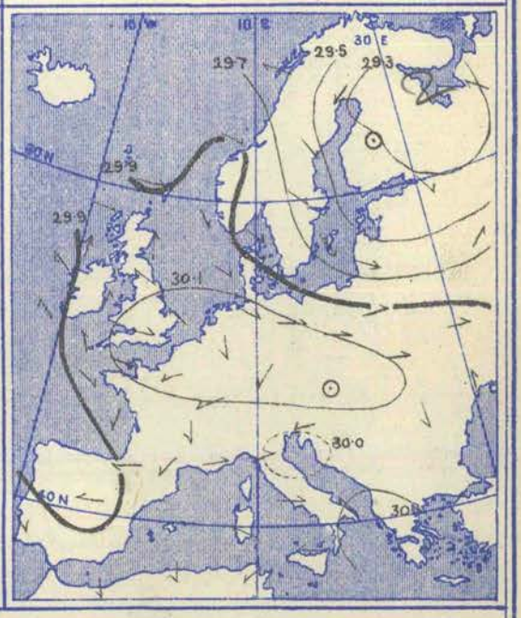
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull and rainy in the south of Ireland, as well as at many of the Baltic stations and at Archangel; fine and bright in nearly all other places, but slight showers at Nairn and Malin Head. Rain falling later in Ireland and Scotland, and also over Scandinavia and northern Russia, but amounts not large except at Archangel and Hernösand, where 0·43 in. and 0·55 in. was measured respectively.

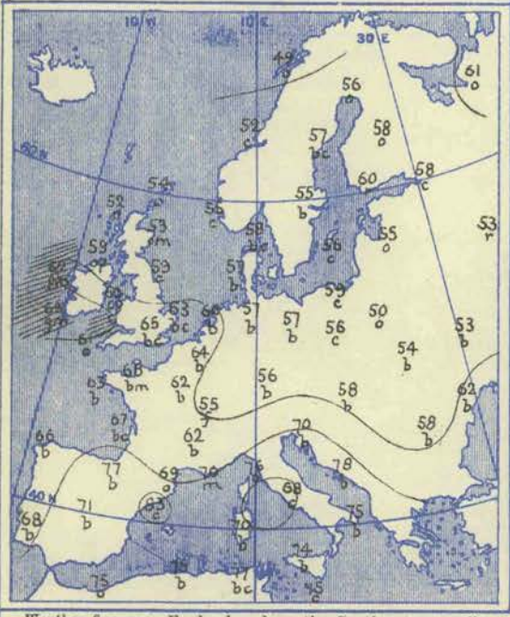
Temperature risen over Great Britain, fallen slightly in most other places. Morning readings highest, 82° at Patras, 80° at Barcelona, 79° at Athens, and above 70° over southern Europe generally. Above 60° over southern Russia, as well as over the greater part of France and at a few stations in the south of England. Lowest, 51° at Christiansund, 52° at Skudesnaes, and 54° in the north-west of Scotland and at Hernösand. Rising during day to 71° at Manchester and 74° in London. Exceeding 80° over southern Europe, reaching 90° at Rochefort and Florence, and 100° at Madrid.

Wind light from West or South-West in Scotland and the north of England, calm over our inland districts, South-Easterly and Easterly in Ireland, Easterly over France. A complete cyclonic circulation over the Balkan Provinces, but Westerly in Austria and southern Russia, mainly light from the Northward over southern Europe and the Mediterranean Southerly wind spreading over our Islands later. No important change occurring elsewhere.

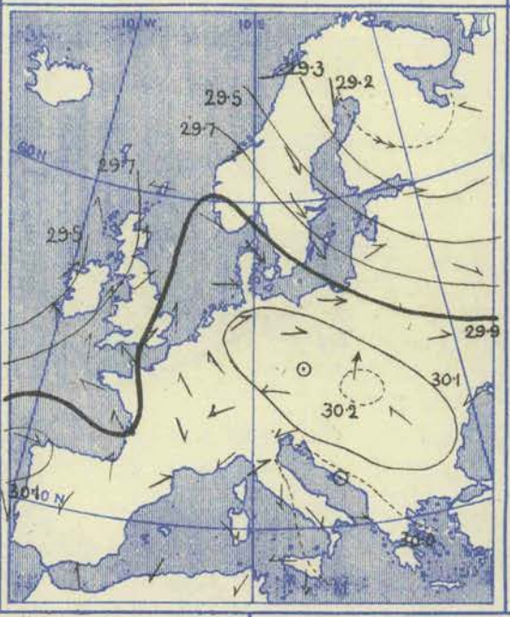
Barometer falling off our own western coasts and the Bay of Biscay, as well as over the north of Russia. Highest, 30·2 ins. and upwards in an anticyclone lying over France, southern Germany, and the south-east of England. Lowest, 29·4 ins. and less in a depression over the Gulf of Finland, and 30·1 ins. and less in a shallow system off the south-west of Ireland. Northern disturbance moving north-eastwards later to northern Russia, and barometer falling decidedly over all our western districts.

Saturday, 8th August, 1903.

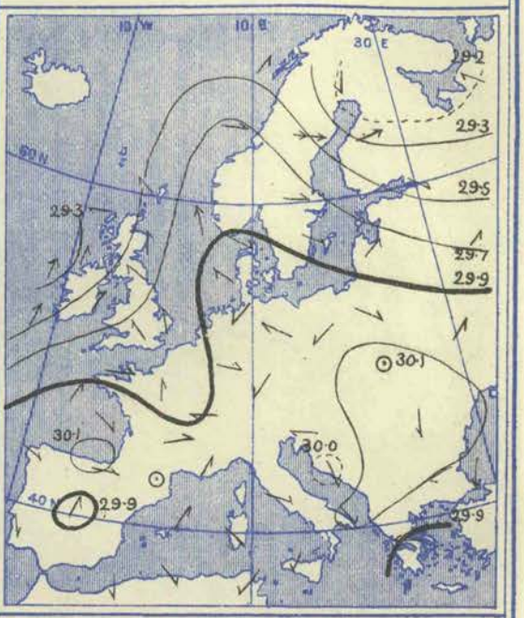
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over England and on the Continent generally, but dull in Ireland, Wales, and Scotland, with showers or steady rain in many places. Rain falling later over the greater part of the United Kingdom, as well as at a few of the French, Scandinavian, and Russian stations. Thunderstorms over the south-western departments of France, and also in the north of Scotland during the night, but accompanying rainfall not large.

Temperature risen somewhat over our Islands, changed irregularly elsewhere. Morning readings highest, 83° at Barcelona, 82° at Aumale, and above 70° over southern Europe generally, above 60° over France and the southern and central parts of England and Ireland, and also at Archangel, above 55° over Scandinavia and central Europe. Lowest, 49° at Bodö, 51° at Nairn, 52° at Christiansund and Stornoway, and 53° at Wick and Aberdeen. Rising during day to 77° at Jersey, 74° at Oxford, and to 79° in London; exceeding 80° over France, Spain, and Italy; rising to considerably above 70° in Austria; touching 91° at Florence, 95° at Algiers, and 99° at Palermo and Madrid, the highest reading of all being 104° at Palma.

Wind Southerly, moderate to strong, over our Islands, reaching the force of a moderate gale at Blacksod, mainly South-Easterly and Easterly over France and the Bay of Biscay, but strong from the North-Westward over Scandinavia and northern Europe generally; variable but mainly light from some northerly point over the Mediterranean. Southerly wind blowing very strongly over our western districts later, and wind veering to the Westward over northern Europe. No material change elsewhere, but slight cyclonic circulation appearing over Spain.

Barometer highest, 30·0 ins. and upwards over the western part of the Iberian Peninsula, and also in two other areas—one lying over Italy and the Adriatic, the other over Germany and Austria. Lowest, 29·5 ins. and less in a depression off the west coast of Ireland, and 29·2 ins. and less in another area over northern Russia and the White Sea. Western disturbance travelling northwards later, and that over northern Europe remaining almost stationary. New shallow areas appearing in many parts of southern Europe.

IV.—GENERAL NOTES, etc.

At the commencement of the period a shallow secondary disturbance passed eastward across England to the North Sea, while an anticyclone over the Spanish Peninsula was spreading slowly northward. On Monday and Tuesday another disturbance crossed Scotland, causing strong Westerly winds or moderate gales in several localities, as far south as the English Channel.

The anticyclone continued to spread, and by Thursday it had attained its greatest intensity, its central space occupying the Bay of Biscay and France, with the barometer above 30·3 inches.

Afterwards the high pressure travelled eastward into the Continent, and the close of the week was again of an unsettled type. A shallow depression suddenly appeared on the south-west coasts on Friday morning, passing out to the Atlantic later, and then moving slowly north-eastward up the western coasts, causing Southerly to Westerly strong winds and moderate gales at a number of western stations.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 182.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	22·8	− 5·9	20	− 5
STRATHPEFFER SPA	24·8	− 3·2	22	− 3
EDINBURGH	43·9	+11·0	40	+ 10
COCKLE PARK	55·5	—	51	—
NEWCASTLE-ON-TYNE	52·5	—	49	—
YORK	—	—	—	—
CROMER	56·1	—	53	—
LOWESTOFT	54·5	—	51	—
DUNMOW	51·4	—	49	—
SHEFFIELD	49·5	—	46	—
WORKSOP	43·3	+ 9·0	41	+ 8
THURCASTON	49·9	+11·7	47	+ 11
TUNBRIDGE WELLS	55·2	—	53	—
MARGATE	50·2	+ 6·9	48	+ 7
BROADSTAIRS	54·8	—	52	—
RAMSGATE	—	—	—	—
EASTBOURNE	60·8	+12·3	58	+ 12
BRIGHTON	57·8	+ 7·5	55	+ 7
WORTHING	61·7	—	59	—
BOGNOR	60·1†	—	57†	—
WATERGATE PARK	56·6	—	54	—
WESTBOURNE	57·6†	+ 9·3	55†	+ 9
VENTNOR HOSPITAL	62·0	+14·9	60	+ 14
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	46·2	+ 5·0	44	+ 5
SOUTHPORT	50·4	—	47	—
RHYL	44·3	—	41	—
ABERDOVEY	48·1†	—	45†	—
TENBY	—	—	—	—
TORQUAY	53·2	+ 4·8	51	+ 5
NEWQUAY	57·6	+10·1	55	+ 10
GUERNSEY	65·3†	+ 9·3	63†	+ 9

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending July 25th, 1903.	Liverpool	—	—	—	—	—	—	—	—	—	—	—	36·2	—	36	—
" " Aug. 1st, "	Lairg	72	45	63·3	47·6	54·9	+ 0·1	90	0	4	0·23	− 0·43	—	—	—	—
" " " " "	Foynes	66	47	63·1	52·0	57·2	− 1·0	106	0	4	1·73	+ 0·94	—	—	—	—
" " " " "	Strathpeffer Spa	—	—	—	—	—	—	—	—	—	—	—	25·0	− 3·0	22	− 3
" " " " "	York	—	—	—	—	—	—	—	—	—	—	—	22·6	−14·4	21	− 13

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 32.] *Third Series.* WEEK ENDING SATURDAY, AUGUST 15TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 188.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	73	39	60·4	46·8	53·2	2 below	78	−12	0	0	1202	− 94	491	− 47
	1. SCOTLAND, EAST	69	38	61·5	47·2	53·9	2 below	83	−20	0	0	1412	−154	502	− 81
	2. ENGLAND, N.E.	72	41	65·0	50·1	57·1	1 below	106	− 9	0	0	1644	− 25	342	−137
	3. ENGLAND, EAST	73	42	67·7	53·1	59·9	0 (average)	125	− 2	0	0	1952	− 6	322	−203
	4. MIDLAND COUNTIES	74	40	66·4	50·1	57·8	2 below	111	−12	0	0	1846	−121	355	−180
	5. ENGLAND, SOUTH	74	41	66·3	53·5	59·5	2 below	123	−13	0	0	2052	− 78	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	69	40	62·4	48·7	55·2	2 below	92	−14	0	0	1593*	− 68	317	− 96
	7. ENGLAND, N.W.	71	39	63·9	51·8	57·5	2 below	109	− 9	0	0	1770	− 30	259	−129
	8. ENGLAND, S.W.	74	40	64·6	52·0	58·0	2 below	112	−12	0	0	2008	+ 12	162	−138
	9. IRELAND, NORTH	68	38	60·9	50·0	55·1	2 below	92	−17	0	0	1635	−128	286	− 61
	10. IRELAND, SOUTH	68	43	63·8	51·1	57·1	2 below	106	−12	0	0	1992*	− 17	183	− 67
	— CHANNEL ISLANDS	72	51	66·0	56·7	61·1	1 below	134	− 5	0	0	2309	+ 57	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 188.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	16	7 more	156	+23	40·6	+13·9	27	+ 1	25	+ 1	730	− 97	24	− 3
	1. SCOTLAND, EAST	6	11	3 more	136	+21	24·2	+ 6·7	28	− 7	26	− 6	804	−133	27	− 4
	2. ENGLAND, N.E.	5	5	1 less	111	+ 5	16·0	+ 1·9	36	− 1	35	− 1	898*	− 82	30	− 3
	3. ENGLAND, EAST	5	14	9 more	99	− 8	17·7	+ 4·1	40	− 4	39	− 4	1040	− 82	35	− 3
	4. MIDLAND COUNTIES	5	9	3 more	108	+ 5	18·9	+ 3·1	36	− 2	35	− 2	904	− 67	30	− 2
	5. ENGLAND, SOUTH	5	14	9 more	111	+11	20·3	+ 5·1	40	− 4	39	− 4	1108	− 18	37	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	5	15	5 more	143	+23	37·4	+10·2	37	+ 3	36	+ 2	909	− 71	30	− 2
	7. ENGLAND, N.W.	6	10	3 more	130	+18	22·8	+ 4·3	40	+ 6	39	+ 6	999	+ 27	33	+ 1
	8. ENGLAND, S.W.	6	14	6 more	125	+12	26·0	+ 5·0	44	− 1	43	− 1	1082	− 86	37	− 3
	9. IRELAND, NORTH	7	20	11 more	158	+22	27·2	+ 7·1	26	− 3	25	− 3	796	−109	27	− 4
	10. IRELAND, SOUTH	5	13	4 more	141	+18	28·7	+ 5·9	37	+ 3	36	+ 3	901	−119	30	− 4
	— CHANNEL ISLANDS	7	16	11 more	132	+17	19·4	+ 2·4	53	− 2	52	− 2	1285	− 52	44	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was of an exceedingly unsettled character, steady rains or heavy passing showers alternating with comparatively fair intervals. Thunderstorms occurred in most parts of the Kingdom, and in some localities were accompanied by hail.

Temperature just equalled the normal height in England E., but was 1° or 2° below it in all other districts. The highest of the maxima (registered either on the 9th or 13th) ranged from 74° in the Midland Counties and England S. and S.W., and 73° in Scotland N. to 69° in the other Scotch districts, and to 68° over Ireland. The lowest of the minima, which were recorded on somewhat irregular dates, varied between 51° in the Channel Islands and 38° in Scotland N. and Ireland N. In the other districts the lowest readings were a little below or slightly above 40°.

Rainfall exceeded the mean in all districts excepting England N.E., the excess being either considerable or very large. Several places again had more than an inch in 24 hours; at Geldeston on Tuesday there was as much as 1·72 ins., and at Markree on Friday 2·04 ins.

Bright Sunshine was deficient over the Kingdom as a whole, but slightly in excess in a few localities. The percentage of the possible duration ranged from 52 in the Channel Islands and 43 in England S.W. to 26 in Scotland E., 25 in Ireland N. and Scotland N.

Barometer and Wind. At the commencement of the week a rather large depression lay off the north-west of Scotland, causing South-Westerly to Southerly winds over the whole Kingdom. This system subsequently moved away north-eastwards, but was soon followed by a well-defined disturbance which passed east-north-eastwards up the English Channel during the latter part of Tuesday and the early hours of Wednesday. The most important low pressure system, however, was that which was seen approaching the south-west of Ireland late on Thursday, its centre travelling north-eastwards directly across Ireland and Scotland during Friday or Saturday. This depression brought gales or very strong winds to all parts of our Islands and the neighbouring parts of the Continent, which were continuing at the end of the period.

307 | 70 219 | 90 Wy. & S. Ltd. 12 | 02

II.—DATA from which the SUMMARY on page 187 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°	-	Inches.	Inches.	*	*	*	*
0. SCOTLAND, N.	Sumburgh Head	58	44	56·6	47·9	52·0	− 1·0	70	0	4	0·66	− 0·05	*	*	*	*
	Stornoway	63	40	59·9	44·9	52·0	− 2·3	70	0	7	1·57	+ 0·75	34·5	+ 4·6	32	+ 4
	Wick	69	40	61·9	45·7	53·3	− 1·4	79	0	6	0·70	+ 0·12	*	*	*	*
	Lairg Ꞩ	73	39	64·5	45·9	54·6	+ 0·1	88	0	7	2·32	+ 1·69	*	*	*	*
	Glencarron Ꞩ	65	41	59·4	46·5	52·6	− 2·0	74	0	7	2·18	+ 0·68	*	*	*	*
	Fort Augustus Ꞩ	62	42	60·6	47·8	53·8	− 2·8	83	0	6	1·75	+ 1·02	20·1	− 0·3	19	0
	Fort William	61	44	60·0	48·3	54·1	− 2·9	85	0	7	1·83	+ 0·53	19·0	− 4·3	18	− 4
1. SCOTLAND, E.	Nairn	68	42	63·1	46·1	54·1	− 2·2	85	0	5	0·57	− 0·03	*	*	*	*
	Aberdeen	64	42	59·4	47·7	53·2	− 3·2	78	0	6	1·21	+ 0·54	26·0	− 8·8	24	− 8
	Braemar Ꞩ	62	38	58·5	43·5	50·6	− 3·0	60	0	7	1·23	+ 0·40	*	*	*	*
	Ochtertyre Ꞩ	69	38	63·0	47·4	54·7	− 2·4	89	0	7	1·67	+ 0·83	*	*	*	*
	Leith	69	45	63·3	51·3	56·9	− 1·3	104	0	6	0·72	+ 0·12	*	*	*	*
	Marchmont Ꞩ	66	40	61·4	47·0	53·8	− 2·1	83	0	6	0·96	+ 0·18	28·8	− 6·4	27	− 6
2. ENGLAND, N.E.	Alnwick Castle	67	41	62·0	46·9	54·0	− 2·8	84	0	7	1·17	+ 0·47	*	*	*	*
	Durham	66	42	63·0	47·1	54·6	− 3·5	88	0	5	0·51	− 0·13	31·3	− 2·4	30	− 2
	Shields	68	46	64·0	51·0	57·1	− 0·4	106	0	4	0·39	− 0·25	*	*	*	*
	Scarborough 𝔐	70	44	66·1	48·9	57·0	− 1·4	105	0	4	0·51	− 0·10	35·2	—	34	—
	Spurn Head	72	52	67·4	54·9	60·8	+ 1·5	132	0	3	0·30	− 0·11	*	*	*	*
	Fulbeck (Lincolnshire)	72	47	67·6	52·0	59·3	− 0·1	121	0	6	0·29	− 0·24	44·1	—	43	—
3. ENGLAND, E.	Hillington 𝔐	72	44	68·2	51·8	59·5	− 0·5	123	0	5	0·80	+ 0·17	39·0	− 1·7	38	− 2
	Yarmouth	72	48	66·3	53·9	59·7	− 0·4	124	0	6	1·52	+ 1·02	*	*	*	*
	Geldeston	73	45	68·8	52·8	60·3	+ 0·3	128	0	5	2·05	+ 1·60	43·0	− 0·7	42	− 1
	Cambridge	73	45	69·2	51·4	59·8	− 1·2	125	0	5	0·75	+ 0·21	34·6	− 7·9	34	− 8
	Felixstowe	70	55	68·0	56·9	62·1	+ 1·7	141	0	4	1·55	—	42·5†	—	41†	—
	Rothamsted	69	42	65·8	50·2	57·5	− 2·2	109	0	6	1·43	+ 0·87	38·7	− 4·4	38	− 4
	Shoeburyness	70	51	67·4	54·7	60·7	− 0·6	131	0	4	1·50	+ 1·10	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	68	44	63·9	48·6	55·8	− 1·9	97	0	5	0·81	+ 0·17	35·0	—	34	—
	Bawtry (Hesley Hall)	74	44	69·7	49·3	58·9	− 0·5	118	0	2	0·86	+ 0·33	*	*	*	*
	Nottingham	71	47	67·6	51·6	59·1	− 1·0	120	0	6	0·35	− 0·22	38·1	—	37·0	—
	Loughborough	72	46	68·4	51·6	59·5	− 1·2	123	0	5	0·46	− 0·09	*	*	*	*
	Colly Weston (Stamford)	73	45	68·7	51·4	59·5	− 1·3	123	0	5	0·63	+ 0·08	*	*	*	*
	Cheadle 𝔐	69	46	64·0	50·7	57·0	− 0·3	105	0	5	1·66	+ 0·88	*	*	*	*
	Birmingham (Edgbaston)	69	43	65·5	49·4	57·0	− 2·1	105	0	5	1·06	+ 0·44	34·6	—	34	—
	Churchstoke 𝔐	—	—	—	—	—	—	—	-	-	—	—	—	—	—	—
	Hereford 𝔐	70	40	? 66·3	? 48·0	? 56·6	− 3·3	? 102	0	3	0·72	+ 0·18	*	*	*	*
	Cirencester	68	42	64·4	48·1	55·8	− 2·8	97	0	6	1·08	+ 0·40	39·1	− 2·7	38	− 3
	Oxford	70	47	65·7	52·1	58·5	− 2·2	116	0	6	1·39	+ 0·86	34·9	− 7·3	34	− 7
5. ENGLAND, S.	London	74	46	68·1	52·1	59·6	− 2·4	123	0	4	1·78	+ 1·27	37·8↓	− 1·5↓	37↓	− 1↓
	Swarraton (Alresford) 𝔐	71	41	65·7	49·7	57·2	− 1·8	106	0	7	1·66	+ 1·03	*	*	*	*
	Dungeness	69	50	66·4	55·9	60·8	− 0·9	132	0	3	1·11	+ 0·70	37·6	—	37	—
	Hastings (St. Leonards)	66	53	64·8	54·6	59·4	− 1·9	122	0	4	1·02	+ 0·49	40·0	− 8·4	39	− 8
	Southampton	74	48	68·6	53·2	60·4	− 1·7	129	0	6	1·82	+ 1·22	43·3	− 4·0	43	− 4
	Portland Bill	66	52	63·9	55·3	59·3	− 1·6	121	0	6	1·12	—	*	*	*	*
	Shaftesbury 𝔐	—	—	—	—	—	—	—	-	-	—	—	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	64	45	62·5	47·8	54·7	− 2·5	89	0	7	2·55	+ 1·31	*	*	*	*
	Glasgow	63	43	61·2	49·4	55·0	− 1·8	91	0	5	1·50	+ 0·62	28·0	− 1·3	26	− 2
	Cally Ꞩ	66	40	63·3	46·7	54·5	− 2·2	88	0	4	1·28	+ 0·25	*	*	*	*
	Aspatria	69	44	63·1	50·1	56·2	− 0·8	99	0	5	0·88	—	38·3	—	37	—
	Douglas (Isle of Man)	64	41	62·1	49·5	55·4	− 1·7	94	0	5	1·04	+ 0·19	46·0	+ 6·6	44	+ 6
7. ENGLAND, N.W.	Newton Rigg	66	39	63·5	47·0	54·8	− 1·8	90	0	7	1·40	—	42·3	—	40	—
	Stonyhurst	65	45	63·5	51·5	57·1	− 1·0	106	0	5	1·42	+ 0·28	38·3	+ 4·3	37	+ 4
	Blackpool 𝔐	69	45	64·0	52·7	58·0	− 1·3	112	0	5	1·09	+ 0·33	47·6	+ 11·9	46	+ 12
	Manchester (Prestwich)	68	46	64·9	50·6	57·3	− 1·2	107	0	6	1·21	+ 0·37	30·3	—	29	—
	Liverpool Obsy. (Bidston)	69	52	63·3	53·6	58·2	− 1·6	113	0	6	0·81	+ 0·15	40·1	—	39	—
	Chester (Hawarden Bridge)	71	49	65·2	51·8	58·1	− 1·9	113	0	5	1·13	—	*	*	*	*
	Llandudno 𝔐	69	48	64·7	53·6	58·8	− 1·3	118	0	5	0·43	− 0·21	39·4	+ 2·1	38	+ 2
	Holyhead	64	51	62·3	53·6	57·7	− 1·5	110	0	6	0·79	+ 0·13	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	-	-	—	—	*	*	*	*
	Pembroke	62	53	61·3	55·4	58·2	− 1·1	113	0	6	1·08	+ 0·43	49·6	+ 5·4	49	+ 5
	Clifton	71	50	66·2	53·9	59·7	− 1·0	124	0	5	1·53	+ 0·77	*	*	*	*
	Bath	74	44	66·4	51·6	58·6	− 2·3	116	0	6	1·42	+ 0·80	37·8	—	37	—
	Arlington (N. Devon)	67	40	63·6	48·3	55·5	− 3·1	95	0	5	1·32	+ 0·20	*	*	*	*
	Cullompton 𝔐	70	43	67·0	48·6	57·3	− 2·8	107	0	6	1·47	+ 0·83	38·1	− 3·7	37	− 4
	Falmouth	66	51	63·7	53·3	58·2	− 2·0	113	0	6	1·57	+ 0·79	48·3	− 0·1	47	0
	Plymouth	66	47	64·2	52·9	58·2	− 3·0	113	0	6	1·10	+ 0·44	44·0	− 1·0	43	− 1
9. IRELAND, N.	Malin Head	60	49	59·4	52·4	55·7	− 2·0	96	0	6	1·03	+ 0·60	*	*	*	*
	Edenfel (Omagh)	64	40	60·6	48·6	54·2	− 2·5	85	0	7	2·78	+ 1·93	*	*	*	*
	Blacksod Point	61	48	59·9	52·1	55·8	− 2·2	97	0	7	2·42	+ 1·35	*	*	*	*
	Markree Castle	68	38	61·5	47·0	53·8	− 3·0	83	0	7	3·44	+ 2·51	18·7	− 11·0	18	− 11
	Armagh	66	43	63·3	49·5	56·0	− 1·5	98	0	7	1·26	+ 0·52	33·6	+ 4·9	32	+ 5
	Donaghadee	62	45	60·4	50·6	55·2	− 2·2	92	0	7	0·87	+ 0·13	*	*	*	*
10. IRELAND, S.	Dublin	68	49	65·5	52·2	58·5	− 0·9	116	0	6	0·62	− 0·06	39·6	+ 2·8	38	+ 3
	Birr Castle	64	43	62·6	49·0	55·4	− 3·0	94	0	5	1·42	+ 0·57	30·7	− 0·9	30	− 1
	Kilkenny	66	43	63·4	50·0	56·3	− 2·7	100	0	5	0·74	− 0·03	*	*	*	*
	Waterford	65	46	63·6	53·0	58·0	− 0·7	112	0	4	1·22	+ 0·33	*	*	*	*
	Roche's Point	65	46	62·7	51·1	56·6	− 2·9	102	0	6	1·17	+ 0·30	*	*	*	*
	Valencia	63	49	61·7	52·1	56·6	− 2·6	102	0	7	2·41	+ 1·31	42·0	+ 7·4	41	+ 7
	Killarney	68	49	65·2	51·7	58·1	− 0·9	113	0	6	1·54	+ 0·48	*	*	*	*
	Foynes	67	48	65·5	49·7	57·1	− 1·4	106	0	4	1·07	+ 0·14	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	66	54	64·6	56·0	60·0	− 1·0	126	0	6	2·42	+ 1·87	50·3	− 1·8	49	− 2
	Jersey	72	51	67·4	57·3	62·1	− 0·9	141	0	7	0·80	+ 0·26	52·4	− 3·0	52	− 3

Stations Marked 𝔐 are in connection with the Royal Meteorological Society, and those marked Ꞩ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

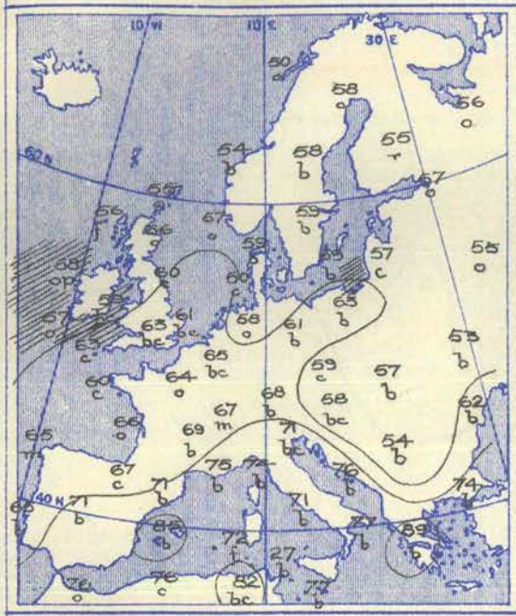
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

↓ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 9th August, 1903.

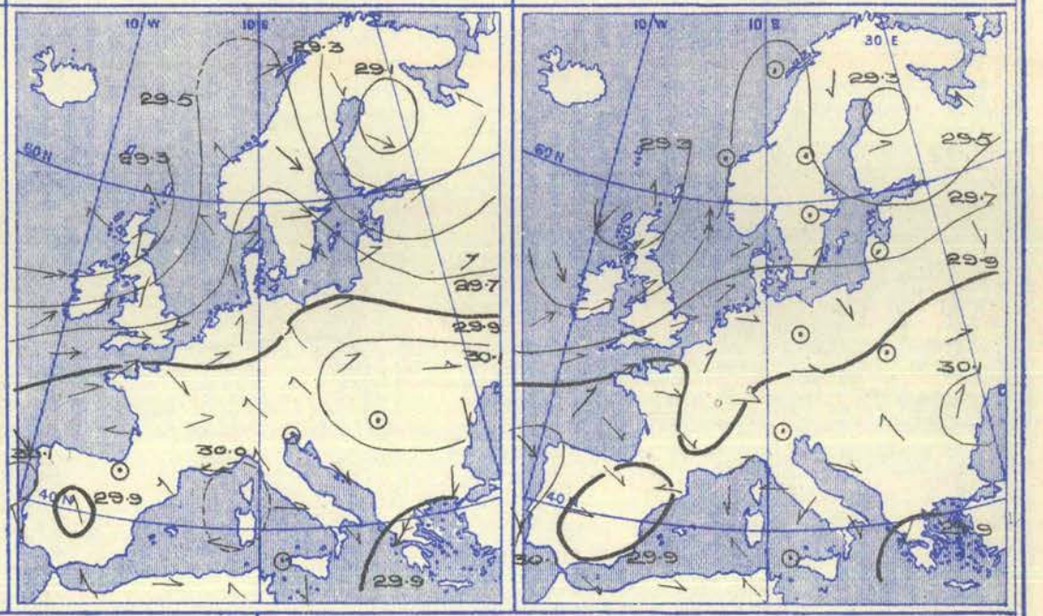
Temperature and Weather. 8 a.m.



Weather in morning dull or cloudy in Ireland and Scotland, with showers in many places, fine on the Continent generally, but a considerable amount of cloud prevailing over northern Russia. Rain over our Islands and the adjacent parts of the Continent later, with thunder at Wick, and thunderstorms in the east and south-east of England. Several large amounts measured over Germany and eastern France, as well as at Scilly and Oxford, the heaviest rain occurring at Lyons, where as much as 1·10 ins. was registered.

Temperature risen somewhat over our Islands and at most of the Continental stations. Morning readings highest, 89° at Patras, 85° at Palma, 82° at La Calle, and 81° at Athens, above 70° over the Mediterranean and the adjoining countries, above 60° over France, western Germany, and at most stations in Great Britain. Lowest, 50° at Bodö, 54° at Christiansund, 55° at Kuopio and Sumburgh Head, and 56° at Stornoway. Rising during day to above 70° in London and over our eastern counties, exceeding 80° over France, Germany, and Austria, reaching 90° at several stations on the coasts of the Mediterranean, and touching 96° at Madrid and 104° at Aumale.

Barometer and Wind. 8 a.m. and 6 p.m.

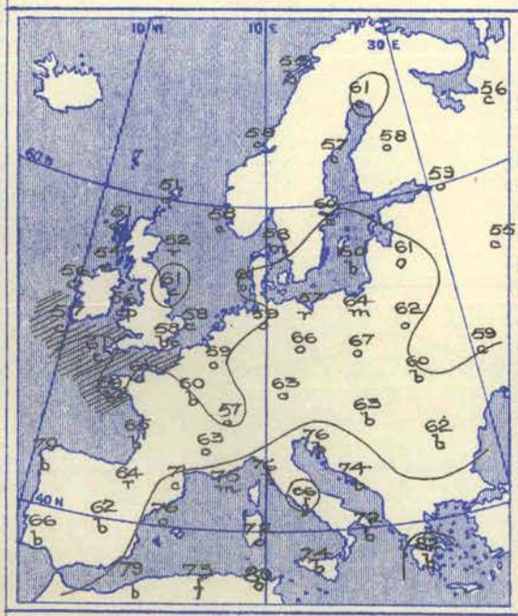


Wind South-Westerly over our Islands generally, and fresh or strong in force, light and variable over the central and southern parts of the Continent, but a well-marked cyclonic circulation shown over northern Russia, and also over the Iberian Peninsula. No material change later, but wind veering to the Westward or North-Westward on our western coasts, and still blowing strongly over Ireland and in many parts of England.

Barometer highest, 30·1 ins. and upwards off the coast of Portugal, and also over southern Russia and the Black Sea. Lowest, 29·1 ins. and less over northern Russia, 29·3 ins. and less in a large disturbance lying to the westward of Scotland, and 29·9 ins. and less in several areas over the Mediterranean. No important change later, but depression off the west of Scotland travelling slowly in a north-easterly direction, those over southern Europe scarcely altering their position.

Monday, 10th August, 1903.

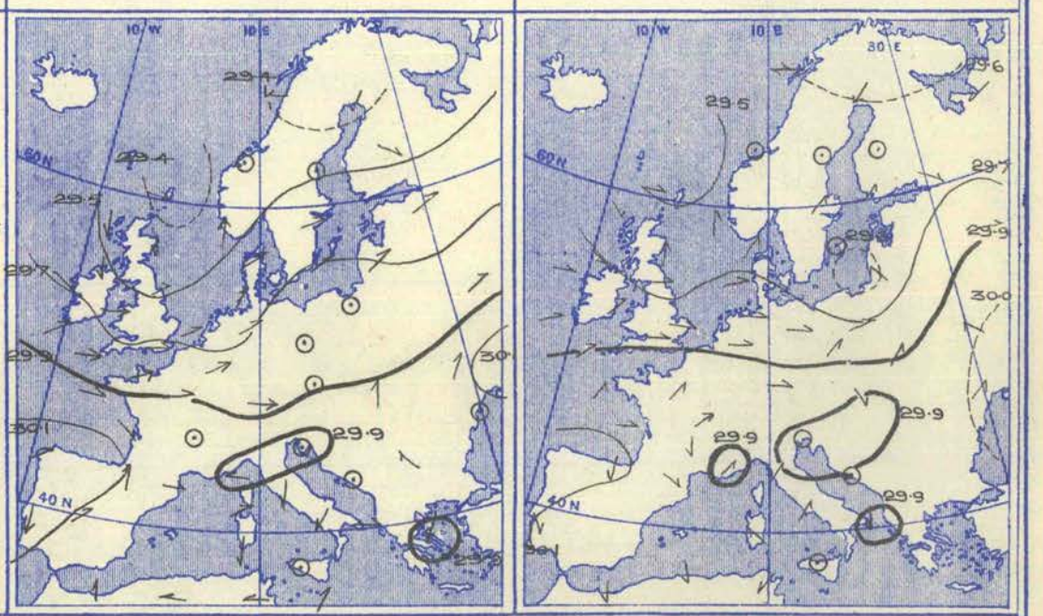
Temperature and Weather. 8 a.m.



Weather at 8 a.m. in a changeable, unsettled, showery condition generally over our Islands and the greater part of western and northern Europe, fine over southern and eastern Europe. Rain falling in most parts of the British Isles and in France, Germany, and Austria during the day, 0·9 in. being measured at Neu-Fahrwasser. Thunderstorms occurred in the early morning and in the afternoon in our southern counties, and on the Baltic in the evening.

Temperature fallen at nearly all stations in western Europe and risen in northern and eastern Europe. Morning readings highest, 82° at Patras, 80° at Malta and La Calle, 70° at Corunna, 67° at Breslau, 61° at Haparanda, Scilly, and Jersey, and 59° at St. Petersburg and Helsingfors. Lowest, 51° at Stornoway, Sumburgh Head, and Nairn, 52° at Wick and Aberdeen, 54° at Malin Head, and 55° at Donaghadee, Liverpool, Bodö, Moscow, and Charkov. Rising during day to 54° at Sumburgh Head, 56° at Aberdeen, 69° at Manchester, 86° at Lésina and Marseilles, and above 90° at several southern stations, to 104° at Biskra.

Barometer and Wind. 8 a.m. and 6 p.m.

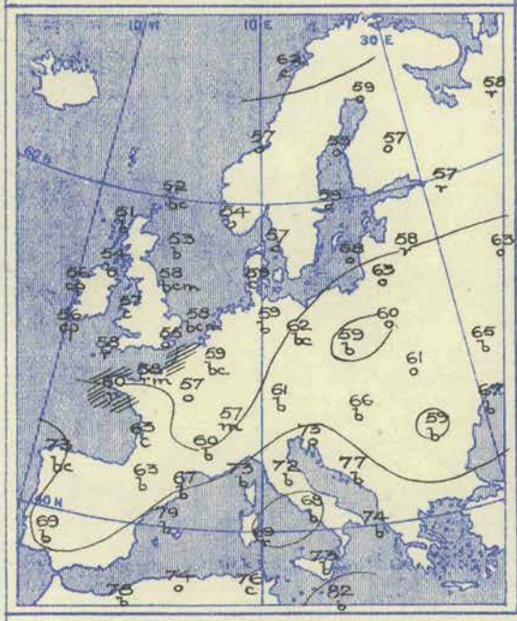


Wind at 8 a.m. fresh or strong from the Westward at some of our own southern coast stations, fresh from north at Lisbon, and strong from South at Skudesnaes, but elsewhere calms and light variable airs largely prevailed. Later increasing to a strong breeze from south-west in the Vosges, and to a moderate gale on the Straits of Dover. No great change occurring elsewhere.

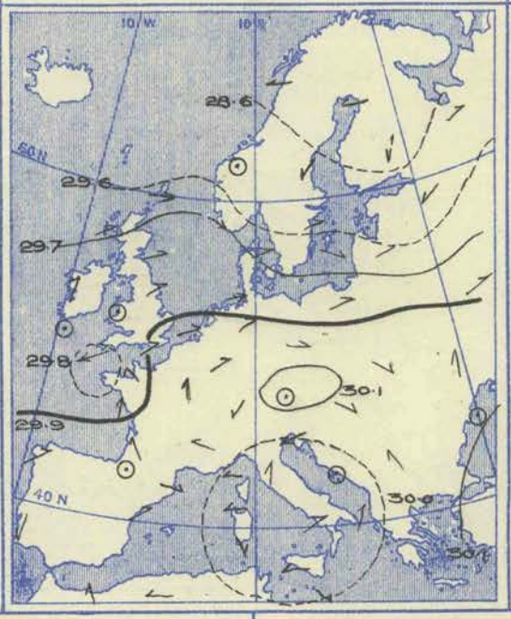
Barometer highest, 30·1 ins. and upwards in two high-pressure systems, one lying over the Iberian Peninsula, the other over southern Russia. Lowest, 29·4 ins. and less in a shallow area over the northern part of the North Sea, and also in another disturbance over northern Russia; below 30 ins. over northern Italy and the Riviera, as well as in a small centre over the southern part of Greece. No important change occurring later, but a small area of low pressure appearing over the Gulf of Danzig.

Tuesday, 11th August, 1903.

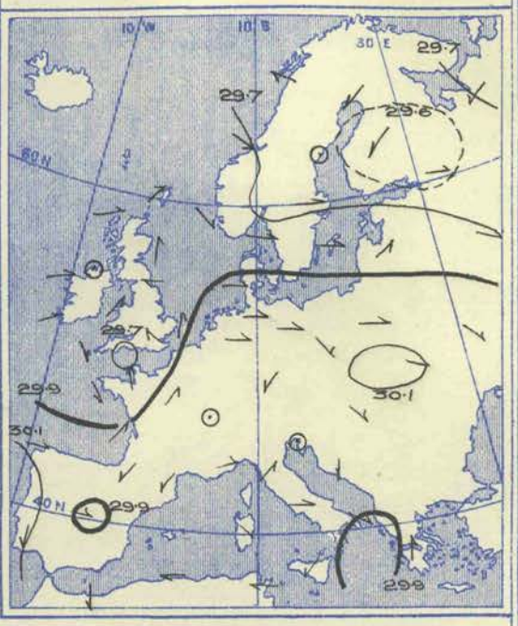
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull and rainy over the English Channel and the north-west coast of France, as well as at several stations in northern Russia, fair in most other places, but showery off the west coast of Ireland. Rain later over our Islands and the neighbouring Continental countries and also in some parts of Italy and Russia, as much as 1·26 ins. at Yarmouth, 1·02 ins. in London, and 2·35 ins. at Leghorn. Thunderstorms over the south-east of England as well at Leith during the night.

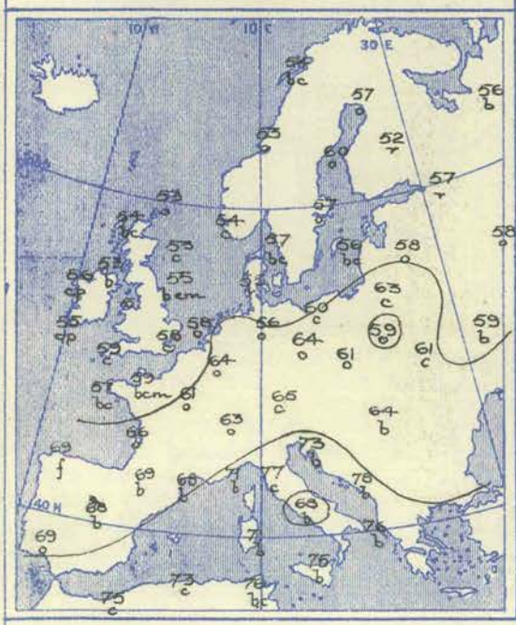
Temperature showing no very great change. Morning readings highest, 82° at Malta, 79° at Barcelona, 78° at Pesaro and Oran, and 77° at Nemours, exceeding 70° over the Mediterranean generally, and above 60° over the central European countries, thermometer below 60° all over our Islands. Rising during day to above 70° over France and central Europe, exceeding 80° over the Mediterranean generally, rising to above 90° in some parts of Italy and Algeria, and touching 97° at Madrid. Failing to reach 70° over these Islands.

Wind South-Westerly light or moderate over the greater part of these Islands and to the eastward of the North Sea, variable over northern and central Europe, but two complete circulations shown, one off the south-west of our Islands, the other over Italy and the Mediterranean. Veering to the Northward later on our south-west coasts, and becoming Southerly in England and Scotland.

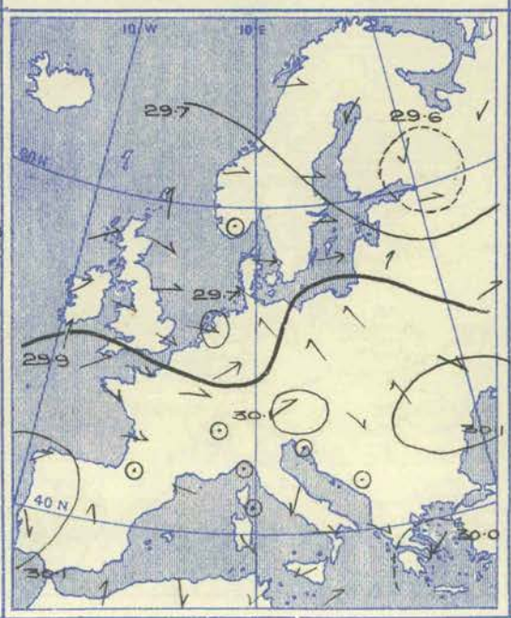
Barometer highest, 30·1 ins. and more over central Europe and also over southern Russia and the Black Sea. Lowest, 29·6 ins. and less over northern Europe, 29·8 ins. and less in a well-marked disturbance off our south-west coasts, and 30·0 ins. and less in a large shallow depression over Italy and the Mediterranean. Western disturbance travelling north-eastwards later, that over southern Europe dispersing, but new shallow area appearing over central Spain.

Wednesday, 12th August, 1903.

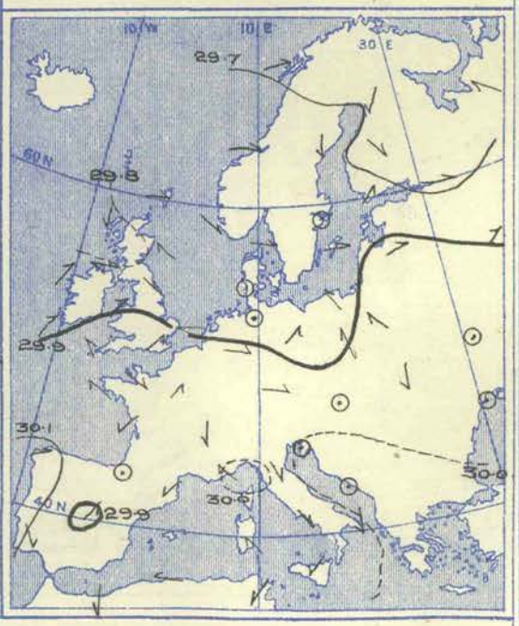
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and clear generally at stations round the Mediterranean and in south-eastern Europe, also in several localities in the British Isles and in Scandinavia; elsewhere mostly dull and overcast, with showers in the west of Ireland and rain in Denmark and north Russia. In the course of the day rain falling in many parts of our Islands and of western and northern Europe, the amounts being, as a rule, less than 0·5 in., but at Besançon 3 ins. was measured. Thunderstorms occurred at various Continental stations.

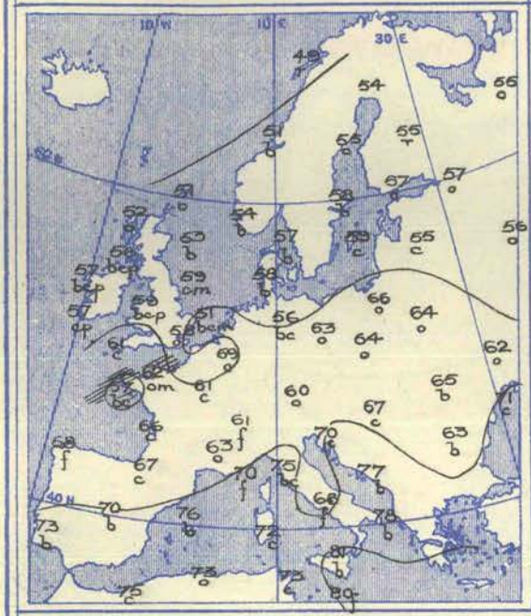
Temperature changing irregularly. Morning readings highest, 83° at Patras, 80° at Athens, 78° at Malta and Lesina, 64° at Berlin and Charkov, 59° at Scilly, Jersey, Dungeness, and Leith. Lowest, 52° at Kuopio, 53° at Malin Head, Aberdeen, Wick, Sumburgh Head, and Christiansund, and 54° at Donaghadee, Stornoway, Nairn, Skudesnaes, and Bodö. Not rising above 54° at Bodö and Christiansund during the day, but to 71° in London, and above 80° at many southern stations, to 95° at Madrid, 104° at Biskra, and 106° at Laghouat.

Wind fresh from the Westward over the eastern half of the English Channel and on the south-east coast, also at Memel, and strong at Wisby, otherwise calms and light variable breezes prevailing over Europe generally in the morning. Everywhere moderate or light in the evening.

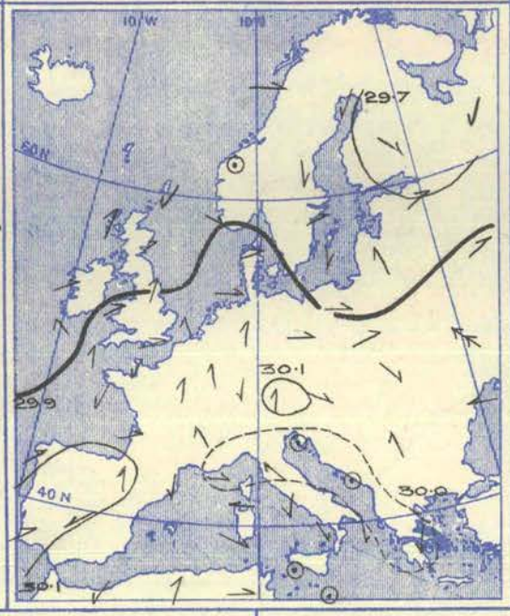
Barometer highest, 30·1 ins. and above over the western portion of the Spanish Peninsula and in east central Europe. Lowest, 29·7 ins. in a small depression on the coast of Holland, and below 29·6 ins. in another over Finland. Rising generally over the northern half of Europe during the day, falling in the south, below 29·9 ins. in central Spain.

Thursday, 13th August, 1903.

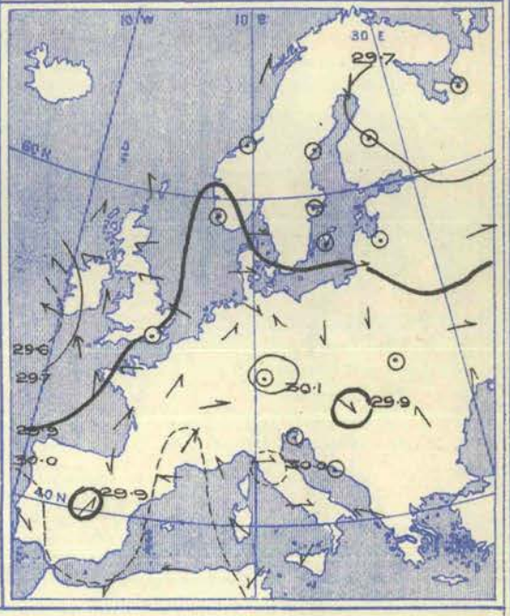
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in most parts of Britain, Scandinavia, and Denmark, also over south-eastern Europe and most of the southern stations; misty or foggy at several stations between Marseilles and Malta, and also on the north-west coast of Spain and in the Vosges; showers falling in Ireland and Wales, rain in Finland and at Turin. Later very unsettled conditions spreading over our Islands from the Atlantic. 0·3 in. of rain falling at Roche's Point, 1·1 ins. at Valencia, and 1·2 ins. at Scilly. Rain also falling at a number of Continental stations—1·7 ins. at Gap.

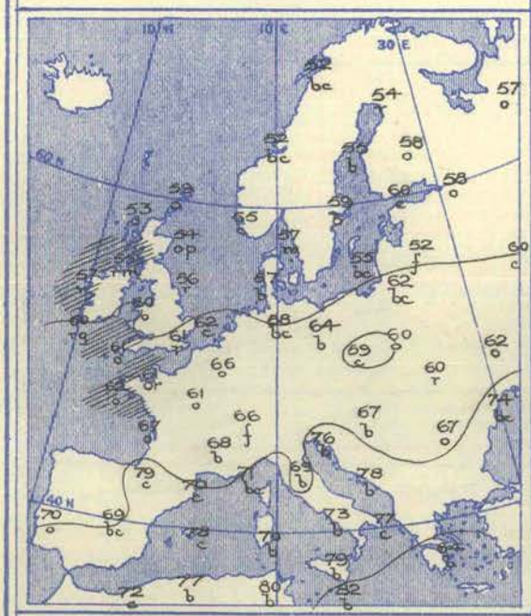
Temperature changes generally very slight. Morning readings highest, 81° at Palermo, 80° at Malta and Athens, 73° at Lisbon, 71° at Odessa, 62° at Dungeness and Jersey. Lowest, 49° at Bodö, 51° at Christiansund and Sumburgh Head, and 52° at Stornoway. In the course of the day rising to 52° at Bodö, 55° at Christiansund, and 57° at Sumburgh Head, to 70° at some English stations, 74° in London, to 80° and upwards round the Mediterranean, to 95° at Madrid and Aumale, and 108° at Biskra.

Wind very light and variable generally throughout Europe and Algeria in the morning. Towards evening Southerly to Easterly breezes setting in over our Islands and freshening decidedly on the south-western coasts.

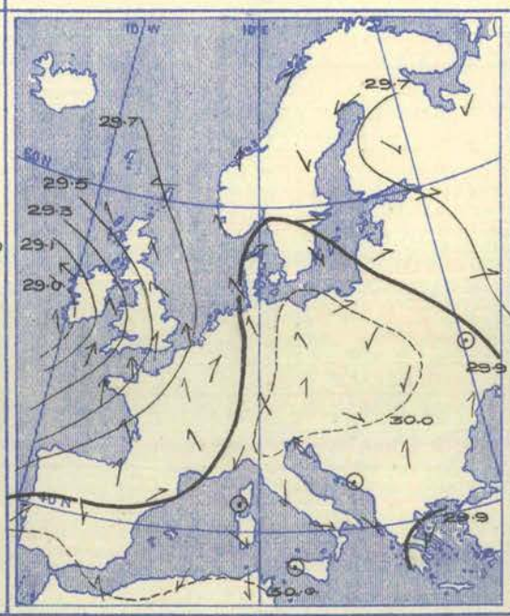
Barometer highest, 30·1 ins. and upwards over the north-western half of the Spanish Peninsula. Lowest, 29·7 ins. and under in a low-pressure area occupying northern Russia. The latter remained stationary during the day; a new disturbance approaching Ireland occasioned a brisk decline of the barometer at our western stations, and a depression—barometer below 29·9 ins.—forming over central Spain. An anticyclone with the barometer above 30·1 ins. forming over central Europe.

Friday, 14th August, 1903.

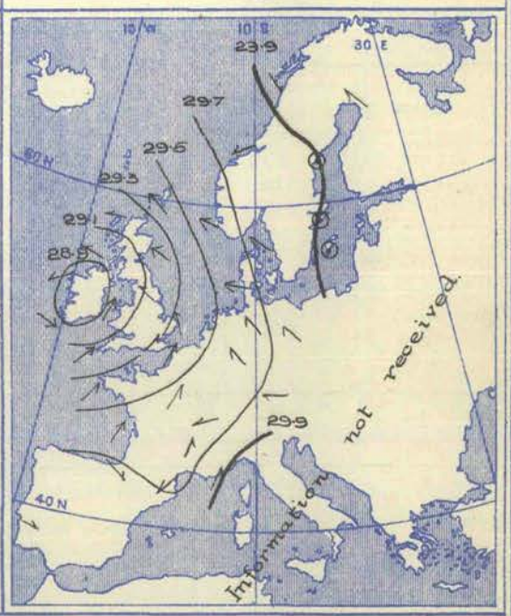
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull in nearly all regions, with rain in most parts of the United Kingdom and also at many Continental stations, but fine in Algeria, Italy, Greece, and the most southern portions of Austria and Russia. Rain falling very generally over the western countries later—amounts heavy in many localities, the largest reported being 0·95 in. at Rochefort and 1·5 ins. at Blacksod Point.

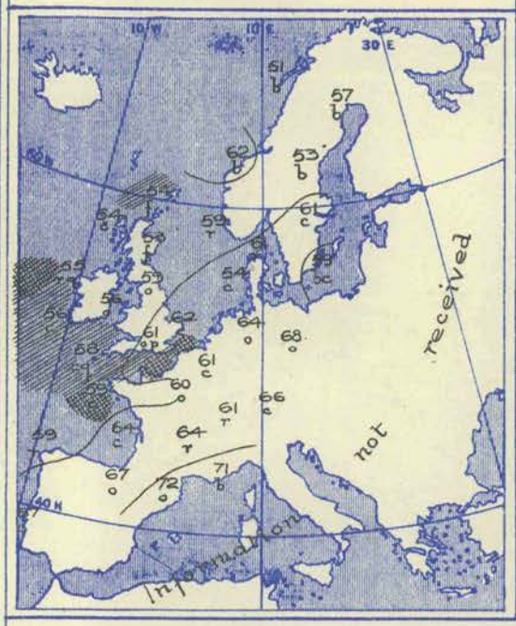
Temperature changed little and irregularly. Morning readings ranging from above 80° in Greece and Malta, 79° at Biarritz, 76° at Trieste, to about 60° over our own southern districts and the northern parts of France, to 53° at Stornoway and Sumburgh Head, and to 52° at Bodö, Christiansund, and Memel. Maxima during day exceeding 83° over the south and east of France and the west of Germany, but thermometer remaining below 70° over the United Kingdom, and not touching 60° at several of our northern stations.

Wind at 8 a.m. moderate to fresh or strong from the Southward over the Iberian Peninsula, France, and the south of England and Ireland, and fresh or strong from the Eastward over all our more northern coasts. Light and variable over nearly all the more eastern, central, and southern parts of our area. Wind veering to the North-Westward in the south-west of Ireland by evening, and backing to East-North-East at Blacksod. Not much change elsewhere.

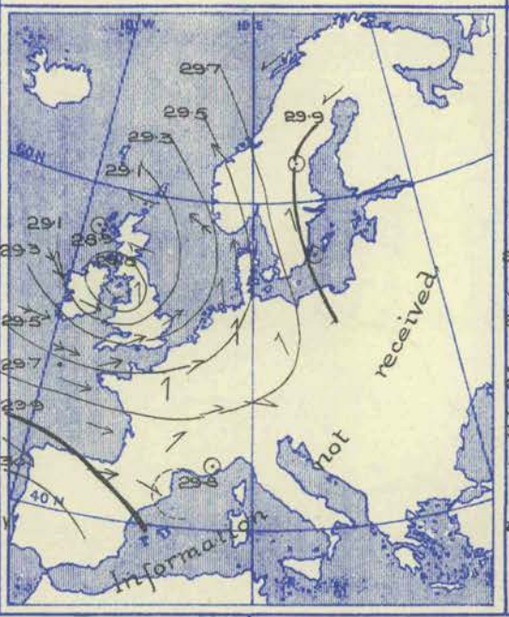
Barometer at 8 a.m. falling quickly on our south-west coasts, changing little over the major portion of the Continent. Readings highest, above 30·0 ins. over the central countries and but little lower over Algeria and the south of Spain. Lowest, less than 29·0 ins. in a deep depression over the south-west of Ireland and the adjacent parts of the Ocean. Relatively low, 29·61 ins. at Archangel. Depression moving in over central Ireland by evening and barometer beginning to rise again at Valencia Island. Falling very briskly over Scotland.

Saturday, 15th August, 1903.

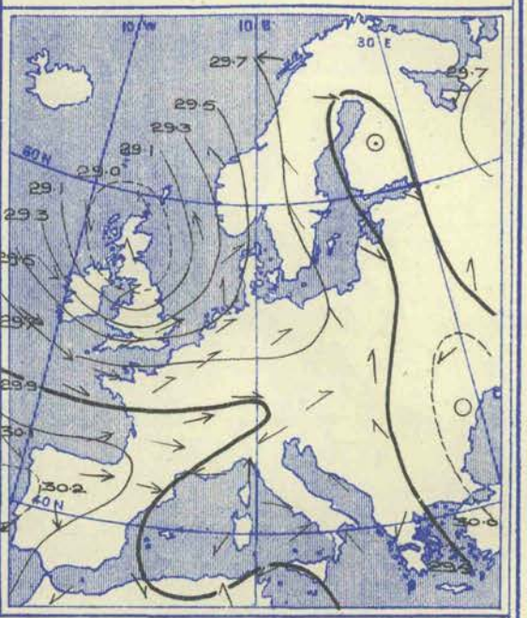
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in Sweden and the north of Norway, but dull and rainy over the western part of our area as a whole, and foggy in the north and east of Scotland. Rain experienced subsequently in the south of Sweden and in parts of Austria and Germany. Largest amounts, 1·06 ins. at Munich, 1·30 ins. at Faerder, and 1·69 ins. at Wisby. Thunder occurring at Nairn and Lyons.

Temperature risen in Denmark and at most of the Scandinavian stations, changed little over our Islands and France. Morning readings ranging from 72° at Perpignan, 68° at Berlin, and 67° at Lisbon, to 54° at Parsonstown, 53° at Aberdeen and Wick, and to 51° at Bodö. Rising later to 82° at Nice, and a few degrees higher at many other southern stations, but remaining below 60° at most of our northern and north-western stations, and only just touching that value at Oxford. Maximum at Stockholm as high as 70°.

Wind at 8 a.m. showing a well-defined cyclonic circulation around the south-west of Scotland, the swirl affecting the whole of western and north-western Europe. Easterly current strong to a gale over the south of Norway, but very light in Scotland. North-Westerly and Westerly to South-Westerly current very strong (a gale in several places) over Ireland, England, the neighbouring channels, and the Netherlands. Not much change later excepting a general veering movement.

Barometer at 8 a.m. rising briskly in Ireland and falling briskly over the North Sea and the eastern parts of Great Britain. Readings highest, 30·1 ins. and upwards over the Iberian Peninsula. Lowest, less than 28·8 ins. in a deep depression over Kirkcudbrightshire. Latter system moving north-eastwards later, and baric rise spreading to the whole of England. Gradients continuing steep except in Scotland.

IV.—GENERAL NOTES, etc.

The general character of the weather over our Islands and continental Europe during this week was cyclonic and very unsettled, with frequent and at times heavy rains in different parts of the United Kingdom, France, and Germany, and smaller amounts in most other regions. Several depressions passed in a north-easterly or easterly direction, over or in the immediate neighbourhood of our Islands and over northern Europe, and as some of them were of considerable depth, the accompanying winds were often of great strength for the time of year. This was especially the case over our Islands and their vicinity on Friday and Saturday, when gale force was experienced over a large area. There were also cyclonic systems shown over Italy and the Mediterranean, but these had little energy, and the gyrating air currents were only light or moderate in force. Temperature remained fairly high over the southern countries, but varied a good deal in the more northern regions, where, however, it was generally below the normal for August. Thunderstorms occurred on several occasions in various parts of France, and they were not infrequent—and sometimes severe—in the United Kingdom.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 188.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	29·4	+ 1·9	27	+ 2	SHEFFIELD	37·6	—	36	—	WESTBOURNE	49·1†	+ 1·6	48†	+ 2
STRATHPEFFER SPA	32·7	+ 5·1	31	+ 5	WORKSOP	36·9	+ 3·5	36	+ 3	VENTNOR HOSPITAL	39·4	- 7·4	39	- 7
EDINBURGH	27·9	- 4·8	26	- 5	THURCASTON	35·0	- 2·4	34	- 2	BOURNEMOUTH	—	—	—	—
COCKLE PARK	35·9	—	34	—	TUNBRIDGE WELLS	38·9	—	38	—	MARLBOROUGH	37·8	- 2·9	37	- 3
NEWCASTLE-ON-TYNE	33·8	—	32	—	MARGATE	40·8	- 1·3	40	- 2	SOUTHPORT	43·2	—	42	—
YORK	34·0	0·0	33	0	BROADSTAIRS	45·0	—	44	—	RHYL	43·3	—	42	—
CROMER	46·7	—	45	—	RAMSGATE	—	—	—	—	ABERDOVEY	44·9†	—	44†	—
LOWESTOFT	45·8	—	45	—	EASTBOURNE	42·7	- 4·5	42	- 4	TENBY	—	—	—	—
DUNMOW	33·0	—	32	—	BRIGHTON	43·9	- 5·5	43	- 5	TORQUAY	43·2	- 4·7	42	- 5
					WORTHING	48·2	—	47	—	NEWQUAY	43·6	- 3·6	43	- 4
					BOGNOR	53·6†	—	53†	—	GUERNSEY	54·7†	- 0·8	54†	- 1
					WATERGATE PARK	34·8	—	34	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Aug. 1st, 1903.	Rhyl	—	—	—	—	—	—	—	—	—	—	—	39·1	—	36	—
" " " 8th, "	Foynes	66	45	63·1	52·6	57·5	- 0·7	109	0	6	0·43	- 0·43	—	—	—	—
" " " " "	York	—	—	—	—	—	—	—	—	—	—	—	44·3	+ 9·3	41	+ 9

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 33.] *Third Series.* WEEK ENDING SATURDAY, AUGUST 22ND, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 194.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	66	35	58·1	44·7	51·0	4 below	63	−25	0	0	1265	−119	491	− 47
	1. SCOTLAND, EAST	69	37	60·8	44·2	52·0	4 below	70	−32	0	0	1482	−186	502	− 81
	2. ENGLAND, N.E.	69	40	62·6	48·3	55·0	3 below	91	−24	0	0	1735	− 49	342	−137
	3. ENGLAND, EAST	73	39	65·0	50·3	57·2	3 below	106	−19	0	0	2058	− 25	322	−203
	4. MIDLAND COUNTIES	69	38	62·8	48·7	55·3	4 below	93	−28	0	0	1938*	− 50	355	−180
	5. ENGLAND, SOUTH	71	40	65·4	53·4	59·1	2 below	120	−13	0	0	2172	− 91	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	69	39	62·2	46·9	54·1	3 below	85	−18	0	0	1679*	− 85	317	− 96
	7. ENGLAND, N.W.	66	42	61·0	50·0	55·2	4 below	92	−23	0	0	1862	− 53	259	−129
	8. ENGLAND, S.W.	67	40	62·9	51·4	56·8	3 below	104	−18	0	0	2112	− 6	162	−138
	9. IRELAND, NORTH	64	37	60·3	48·0	53·8	3 below	83	−24	0	0	1718	−152	286	− 61
	10. IRELAND, SOUTH	65	39	62·1	48·2	54·7	4 below	89	−27	0	0	2081	− 44	183	− 67
	— CHANNEL ISLANDS	66	53	63·7	55·7	59·5	3 below	123	−16	0	0	2432	+ 41	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 194.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	12	3 more	162	+25	41·8	+14·1	32	+ 6	30	+ 6	762	− 91	24	− 3
	1. SCOTLAND, EAST	5	5	3 less	141	+22	24·7	+ 6·4	51	+17	50	+17	855	−115	27	− 4
	2. ENGLAND, N.E.	4	8	3 more	115	+ 5	16·8	+ 2·1	45	+ 9	44	+ 8	943	− 73	30	− 2
	3. ENGLAND, EAST	4	10	5 more	103	− 8	18·7	+ 4·6	44	+ 1	44	+ 1	1084	− 81	35	− 3
	4. MIDLAND COUNTIES	4	16	10 more	112	+ 5	20·5	+ 4·1	40	+ 5	40	+ 5	944	− 62	31	− 2
	5. ENGLAND, SOUTH	5	8	3 more	116	+13	21·1	+ 5·3	44	+ 1	45	+ 1	1152	− 17	38	0
Principal Grazing Districts.	6. SCOTLAND, WEST	4	7	3 less	147	+23	38·1	+ 9·9	56	+21	55	+21	964*	− 52	31	− 2
	7. ENGLAND, N.W.	5	13	5 more	135	+19	24·1	+ 4·9	46	+11	45	+11	1045	+ 37	34	+ 1
	8. ENGLAND, S.W.	5	10	3 more	130	+13	27·1	+ 5·4	48	+ 3	48	+ 3	1130	− 82	37	− 3
	9. IRELAND, NORTH	6	8	0 (average)	164	+23	28·0	+ 7·1	44	+16	44	+16	840	− 94	27	− 3
	10. IRELAND, SOUTH	6	16	7 more	147	+20	30·3	+ 6·6	44	+10	44	+10	945	−109	31	− 4
	— CHANNEL ISLANDS	6	17	12 more	138	+19	21·1	+ 3·5	42	−12	42	−12	1327	− 64	44	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather. The conditions were again extremely unsettled and rainy very generally, although towards the end of the week they became fine over the greater part of England. The amount of sunshine was, too, greater than that of the preceding week. Thunderstorms were experienced in many localities, chiefly about the middle of the period.

Temperature was below the mean, the deficit ranging from 2° in England S. to 3° or 4° elsewhere. The highest of the maxima were recorded on rather variable dates, and ranged from 73° in England E. and 71° in England S. to 64° in Ireland N. The lowest of the minima, which were registered towards the end of the period, were as low as 35° in Scotland N. and 37° in Scotland E. and Ireland N. In most other districts they were about 40°, but in the Channel Islands the lowest reading was 53°.

Rainfall was again in excess of the mean in nearly all districts, but only just equal to it in Ireland N. and rather less in Scotland W. and E.

Bright Sunshine exceeded the mean in all districts except the Channel Islands: in Scotland E. and W. and in Ireland N. the excess was large. The percentage of the possible duration ranged from 55 in Scotland W., 50 in Scotland E., and 48 in England S.W. to 40 in the Midland Counties, and to 30 in Scotland N.

Barometer and Wind. Several depressions, both primary and secondary, appeared over our Islands or their immediate neighbourhood, coming from the westward or south-westward, and as those which affected our coasts during the earlier half of the week were rather deep, strong winds (mostly from between South and West) were very general, and in the English Channel moderate to fresh gales were again experienced. By the end of the period pressure was recovering over Great Britain, but a fresh decrease in Ireland indicated the approach of another depression from the Atlantic.

307 | 70 Wy. & S. Ltd.
219 | 90 12 | 02

II.—DATA from which the SUMMARY on page 193 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	56	42	54·9	44·7	49·5	- 3·2	53	0	5	0·40	- 0·34	*	*	*	*
	Stornoway	61	41	58·6	43·7	50·7	- 3·4	61	0	6	1·40	+ 0·56	35·8	+ 6·8	34	+ 7
	Wick	62	35	59·4	43·1	50·8	- 3·6	62	0	6	0·55	- 0·05	*	*	*	*
	Lairg Ⓢ	66	38	59·6	43·1	50·9	- 3·4	62	0	6	1·77	+ 1·13	*	*	*	*
	Glencarron Ⓢ	59	42	55·6	45·2	50·1	- 4·4	57	0	6	1·90	+ 0·36	*	*	*	*
	Fort Augustus Ⓢ	62	39	59·1	45·6	52·0	- 4·3	70	0	5	0·60	- 0·15	22·6	+ 2·7	22	+ 3
	Fort William	63	44	59·6	47·3	53·1	- 3·7	78	0	6	2·08	+ 0·72	26·9	+ 4·3	26	+ 4
1. SCOTLAND, E.	Nairn	64	39	59·9	43·7	51·3	- 4·9	65	0	5	0·34	- 0·26	*	*	*	*
	Aberdeen	65	42	60·7	45·3	52·5	- 3·7	74	0	7	0·54	- 0·13	44·5	+ 10·5	43	+ 10
	Braemar Ⓢ	59	37	55·0	41·4	47·8	- 5·4	43	2	5	0·61	- 0·24	*	*	*	*
	Ochtertyre Ⓢ	68	38	62·4	41·7	51·4	- 5·5	67	1	7	1·01	+ 0·17	*	*	*	*
	Leith Ⓢ	69	46	65·3	48·7	56·5	- 1·6	102	0	2	0·19	- 0·41	*	*	*	*
	Marchmont Ⓢ	63	42	61·4	44·6	52·5	- 3·3	74	0	2	0·12	- 0·65	52·0	+ 17·7	51	+ 17
2. ENGLAND, N.E.	Alnwick Castle	67	40	62·4	45·2	53·3	- 3·2	79	0	3	0·15	- 0·55	*	*	*	*
	Durham	63	44	62·0	47·1	54·1	- 3·7	85	0	2	0·19	- 0·43	? 41·3	+ 8·7	? 41	+ 9
	Shields	65	46	62·6	49·0	55·4	- 1·8	94	0	3	0·15	- 0·48	*	*	*	*
	Scarborough Ⓜ	67	43	63·1	47·0	54·6	- 3·7	88	0	4	0·58	- 0·02	44·8	—	44	—
	Spurn Head	69	50	62·6	51·7	56·8	- 2·4	104	0	5	1·89	+ 1·47	*	*	*	*
	Fulbeck (Lincolnshire)	66	43	62·9	49·6	55·9	- 3·1	97	0	5	2·09	+ 1·54	37·5	—	38	—
3. ENGLAND, E.	Hillington Ⓜ	73	39	65·4	47·2	55·8	- 4·0	97	0	4	1·40	+ 0·77	36·5	- 2·9	37	- 3
	Yarmouth	64	47	63·1	50·9	56·6	- 3·6	102	0	4	0·95	+ 0·44	*	*	*	*
	Geldeston	67	44	64·9	49·2	56·6	- 3·4	102	0	3	1·17	+ 0·73	40·3	- 1·7	41	- 2
	Cambridge	70	42	66·4	49·5	57·4	- 3·4	108	0	3	0·83	+ 0·30	45·7	+ 4·1	46	+ 4
	Felixstowe	67	47	64·9	52·1	58·1	- 2·0	113	0	4	0·86	—	47·0†	—	47†	—
	Rothamsted	67	42	63·8	49·6	56·3	- 3·3	100	0	4	0·87	+ 0·32	47·9	+ 5·6	48	+ 6
	Shoeburyness	70	49	66·4	53·4	59·5	- 1·6	123	0	5	1·18	+ 0·78	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	64	44	61·2	47·2	53·8	- 3·6	83	0	5	1·41	+ 0·74	38·9	—	39	—
	Bawtry (Hesley Hall)	68	43	63·0	49·0	55·6	- 3·5	95	0	4	1·71	+ 1·16	*	*	*	*
	Nottingham	65	42	62·4	48·4	55·0	- 4·6	91	0	4	2·06	+ 1·49	37·2	—	37	—
	Loughborough	66	42	63·7	49·6	56·2	- 4·0	99	0	5	2·01	+ 1·45	*	*	*	*
	Colly Weston (Stamford)	69	43	63·6	49·0	55·9	- 4·7	97	0	5	1·24	+ 0·70	*	*	*	*
	Cheadle Ⓜ	64	46	60·2	47·8	53·6	- 3·6	81	0	5	2·46	+ 1·68	*	*	*	*
	Birmingham (Edgbaston)	65	45	61·9	49·0	55·1	- 3·8	92	0	5	1·97	+ 1·34	38·5	—	39	—
	Churchstoke Ⓜ	—	—	—	—	—	—	—	-	-	—	—	—	—	—	—
	Hereford Ⓜ	67	39	63·7	48·7	55·8	- 4·0	97	0	5	1·02	+ 0·47	*	*	*	*
	Cirencester	65	38	63·4	47·1	54·8	- 3·4	90	0	3	1·08	+ 0·38	50·1	+ 9·4	51	+ 10
	Oxford	67	43	64·7	50·7	57·3	- 3·4	107	0	3	0·73	+ 0·20	47·0	+ 5·5	48	+ 6
5. ENGLAND, S.	London	71	50	67·0	53·0	59·6	- 2·3	123	0	5	0·82	+ 0·31	45·4‡	+ 6·8‡	46‡	+ 7‡
	Swarraton (Alresford) Ⓜ	69	40	64·6	50·2	57·0	- 1·9	105	0	4	0·85	+ 0·21	*	*	*	*
	Dungeness	70	50	66·1	54·9	60·2	- 1·5	127	0	5	0·81	+ 0·37	36·6	—	37	—
	Hastings (St. Leonards)	67	50	64·7	53·9	59·0	- 2·4	119	0	5	0·68	+ 0·14	46·2	- 0·8	47	- 1
	Southampton	71	47	68·0	53·0	60·1	- 1·7	127	0	6	1·24	+ 0·64	51·6	+ 5·3	52	+ 5
	Portland Bill	63	53	62·1	55·4	58·6	- 2·3	116	0	3	0·47	—	*	*	*	*
	Shaftesbury Ⓜ	65	—	63·0	—	—	—	—	-	5	0·88	+ 0·22	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	65	41	60·9	45·8	52·9	- 4·0	76	0	7	1·95	+ 0·68	*	*	*	*
	Glasgow	62	46	59·9	47·8	53·5	- 3·1	81	0	5	0·57	- 0·33	50·1	+ 21·6	49	+ 21
	Cally Ⓢ	69	39	66·4	45·5	55·3	- 1·1	93	0	3	0·29	- 0·85	*	*	*	*
	Aspatria	65	41	62·0	47·2	54·2	- 2·4	85	0	3	0·65	—	58·4	—	58	—
	Douglas (Isle of Man)	65	41	61·6	48·4	54·6	- 2·4	88	0	3	0·29	- 0·59	58·3	+ 20·2	58	+ 20
7. ENGLAND, N.W.	Newton Rigg	66	43	62·1	46·3	53·7	- 2·7	82	0	4	0·68	—	54·1	—	54	—
	Stonyhurst	63	46	58·8	49·1	53·7	- 4·3	82	0	5	1·86	+ 0·69	35·6	+ 2·8	35	+ 3
	Blackpool Ⓜ	63	49	61·2	50·9	55·7	- 3·4	96	0	6	0·91	+ 0·14	53·4	+ 19·0	53	+ 19
	Manchester (Prestwich)	64	42	60·0	48·6	54·0	- 4·1	84	0	6	1·46	+ 0·62	28·6	—	28	—
	Liverpool Obsy. (Bidston)	62	50	60·3	51·3	55·5	- 4·1	95	0	6	1·43	+ 0·77	48·2	—	48	—
	Chester (Hawarden Bridge)	65	47	62·2	50·2	55·8	- 4·0	97	0	5	1·41	—	*	*	*	*
	Llandudno Ⓜ	64	49	62·6	51·4	56·7	- 3·2	103	0	6	1·65	+ 1·00	46·4	+ 10·2	46	+ 10
	Holyhead	62	50	61·1	51·9	56·2	- 2·8	99	0	5	1·14	+ 0·47	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	-	-	—	—	*	*	*	*
	Pembroke	61	51	59·9	53·3	56·4	- 2·8	101	0	4	1·46	+ 0·80	52·3	+ 9·1	53	+ 9
	Clifton	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Bath	67	41	65·3	50·6	57·5	- 3·5	109	0	5	0·70	+ 0·07	49·3	—	50	—
	Arlington (N. Devon)	63	43	61·9	49·3	55·2	- 3·4	92	0	6	1·43	+ 0·29	*	*	*	*
	Cullompton Ⓜ	67	40	65·2	49·9	57·1	- 2·6	106	0	5	0·60	- 0·04	39·6	- 1·5	40	- 2
	Falmouth	64	49	62·0	52·0	57·2	- 3·0	106	0	6	1·00	+ 0·19	49·2	+ 1·5	50	+ 2
	Plymouth	65	43	62·9	52·3	57·3	- 3·7	107	0	5	0·97	+ 0·32	48·9	+ 4·7	49	+ 5
9. IRELAND, N.	Malin Head	60	49	57·4	50·6	53·8	- 3·6	83	0	6	1·06	+ 0·32	*	*	*	*
	Edenfel (Omagh)	62	38	59·9	45·4	52·2	- 3·9	71	0	5	0·50	- 0·34	*	*	*	*
	Blacksod Point	61	46	59·7	50·1	54·6	- 3·5	88	0	4	1·17	+ 0·03	*	*	*	*
	Markree Castle	64	37	61·6	45·8	53·2	- 3·3	78	0	6	0·78	- 0·16	38·7	+ 9·8	38	+ 10
	Armagh	64	44	62·1	47·1	54·2	- 3·0	85	0	6	0·57	- 0·17	49·7	+ 21·5	49	+ 21
	Donaghadee	64	44	61·1	48·7	54·5	- 2·7	88	0	7	0·86	+ 0·12	*	*	*	*
10. IRELAND, S.	Dublin	65	46	62·7	49·1	55·5	- 3·7	95	0	6	0·86	+ 0·17	49·4	+ 13·0	49	+ 13
	Birr Castle	64	42	62·7	45·9	53·8	- 4·2	83	0	5	1·30	+ 0·45	42·4	+ 11·1	42	+ 11
	Kilkenny	64	39	62·1	46·0	53·6	- 5·3	81	0	6	1·85	+ 1·07	*	*	*	*
	Waterford	65	41	62·4	47·6	54·6	- 4·1	88	0	7	1·93	+ 1·08	*	*	*	*
	Roche's Point	63	44	61·0	48·7	54·5	- 5·1	88	0	7	1·63	+ 0·75	*	*	*	*
	Valencia	63	48	60·7	50·4	55·2	- 3·8	92	0	7	2·03	+ 0·93	38·9	+ 4·9	39	+ 5
	Killarney	65	46	63·5	49·0	55·8	- 3·0	97	0	6	1·88	+ 0·80	*	*	*	*
	Foynes	64	47	61·3	48·5	54·5	- 3·8	88	0	7	0·97	+ 0·02	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	54	63·7	56·4	59·3	- 1·6	121	0	6	1·10	+ 0·54	45·8	- 6·2	46	- 6
	Jersey	66	53	63·7	56·0	59·6	- 3·3	123	0	5	2·33	+ 1·78	37·6	- 17·2	38	- 17

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

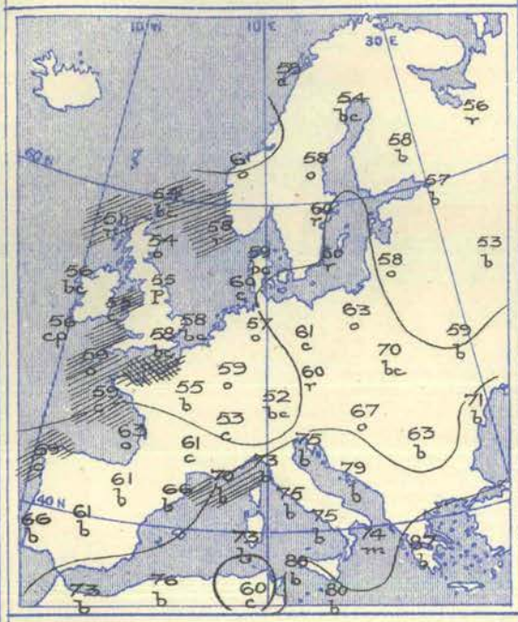
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

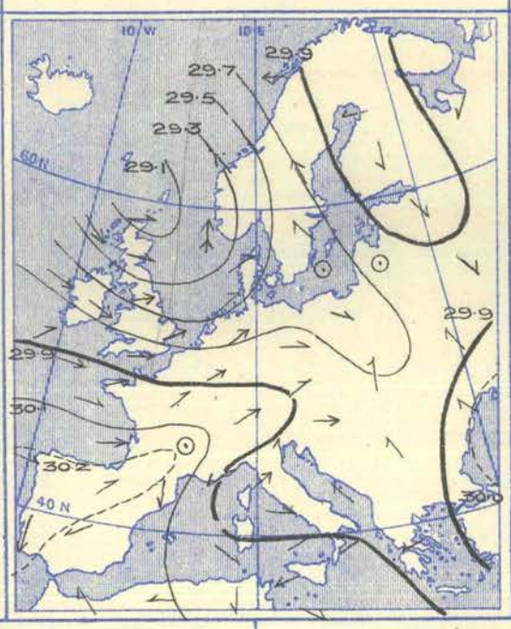
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 16th August, 1903.

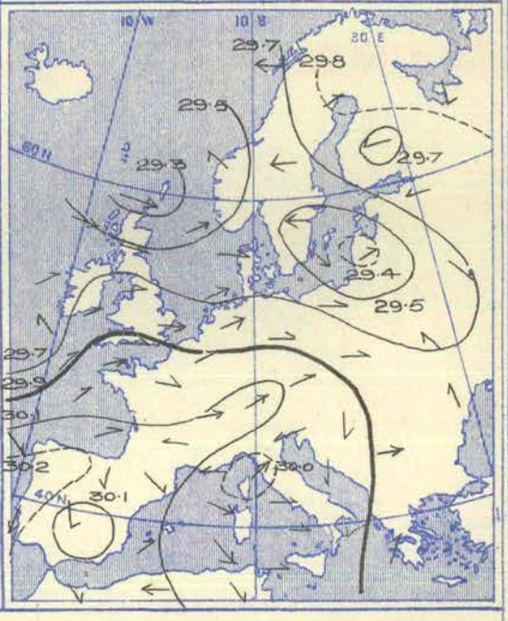
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in nearly all parts of Russia, Finland, and south-eastern Europe, and also over the south-eastern counties of England. Cloudy or dull elsewhere, with showers in various parts of the United Kingdom, and steady rain over the south of Scandinavia, at Archangel and Prague, and a thunderstorm at Vienna. Rain falling later in most northern regions—heavily in Sweden and east Prussia. Largest amounts, 1·62 ins. at Wisby and 2·68 ins. at Stockholm.

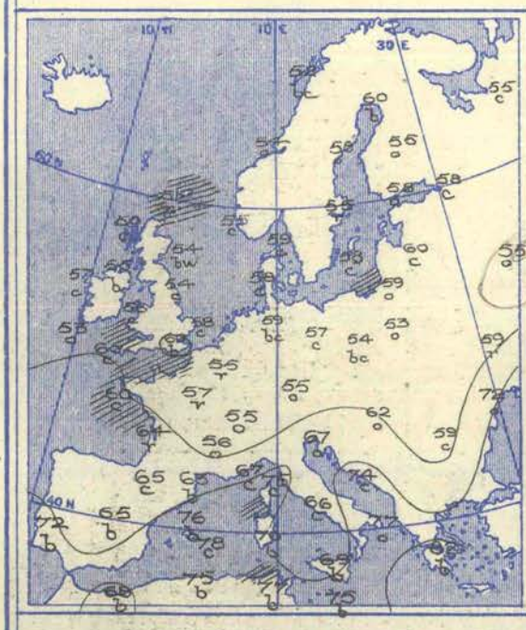
Temperature at 8 a.m. highest, 87° at Athens, 80° at Palermo and Malta, 79° at Lésina, 75° at Trieste, and 73° at Barcelona. Lowest, (1) 50° at Nairn, (2) 52° at Munich, (3) 53° at Moscow, (4) 54° at Haparanda. Below 60° at all our stations except Dungeness and Jersey. Maxima during day low over our Islands and their neighbourhood, but as high as 70° at Haparanda, 73° at Christiansund, above 80° in the extreme south of France and on most shores of the Mediterranean, and also over central Spain.

Wind in morning circulating round a centre near the Shetlands. North-Westerly to Westerly current blowing very freshly or with the force of a moderate gale over our Islands, and the Southerly wind blowing a gale at Skudesnaes. Light and somewhat variable airs prevailing in most parts of the Mediterranean and eastern Europe, but a cyclonic movement of fresh or strong winds shown over the Gulf of Genoa. Backing to South or South-East in the south of Ireland by evening, and a distinct cyclonic circulation setting in around the Gulf of Riga. Southerly gale at Skudesnaes subsiding.

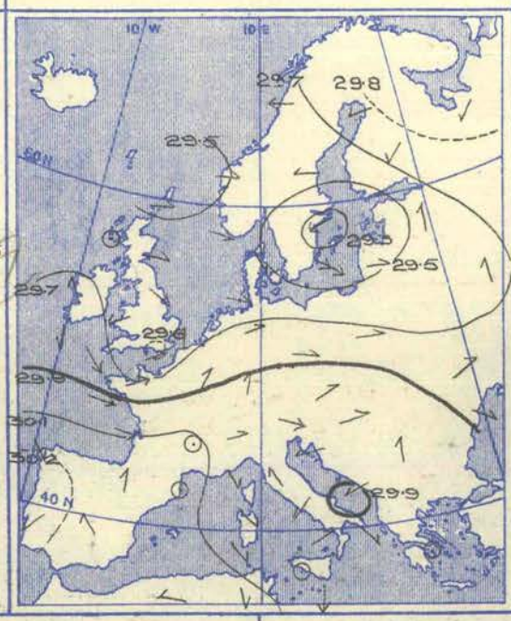
Barometer at 8 a.m. highest, 30·2 ins. and upwards in the south-west of France and the northern portions of the Spanish Peninsula, and lowest, about 29·0 ins. in a cyclonic centre near the Shetlands. Relatively low in ill-defined areas over the Baltic and the Gulf of Genoa. Another depression approaching Ireland by evening, and a rather deep system developing near Riga. Northern disturbance moving north-eastwards and apparently becoming less deep.

Monday, 17th August, 1903.

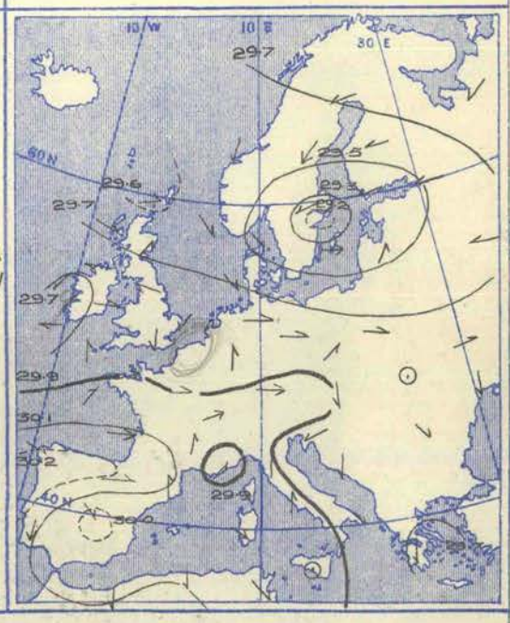
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in the extreme north of our area, over the Spanish Peninsula, and on the shores of the Mediterranean. Cloudy or overcast in all other regions, and rainy in the north of France, at many English stations, and at some of those in Scandinavia. Considerable falls of rain later over the western and north-western countries—particularly in some parts of the United Kingdom and Scandinavia—0·99 in. at Stockholm, 0·93 in. at Blacksod, and 0·83 in. at Nottingham and Christiansund.

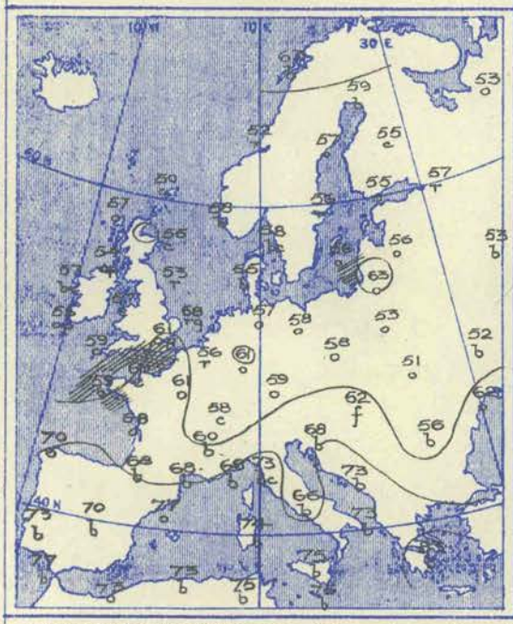
Temperature changed rather irregularly, but fallen in most regions. Readings at 8 a.m. ranging from 82° at Athens, 77° at Brindisi and La Calle, and 76° at Barcelona, to below 60° over the northern half of Europe generally, to 53° at Warsaw and Parsonstown, and to 50° in the Hebrides. Rising later to 71° in London, 73° at Haparanda, 85° at Perpignan, 93° at Patras, and to 113° at Madrid. Thermometer only touching 63° at Munich and 60° at Belfort.

Wind at 8 a.m. showing several complete or partial cyclonic circulations. Force varying greatly. Westerly winds strong over the English Channel and its neighbourhood, a Westerly gale prevailing in Gothland and very strong Easterly winds over the Gulf of Finland and at Stockholm. No great modification later, but gale subsiding in Gothland and another cyclonic movement springing up in Ireland.

Barometer in morning highest, 30·2 ins. and upwards over Portugal and the western part of Spain. Lowest, less than 29·3 ins. in a small minimum near Stockholm. No higher than 29·5 ins. in a shallow depression off the west of Norway, and about 29·6 ins. in a secondary system over the southern counties of England. Swedish depression increasing in depth during day, and the English secondary becoming less deep and moving eastwards. A fresh disturbance approaching Ireland and travelling quickly eastwards during the ensuing night.

Tuesday, 18th August, 1903.

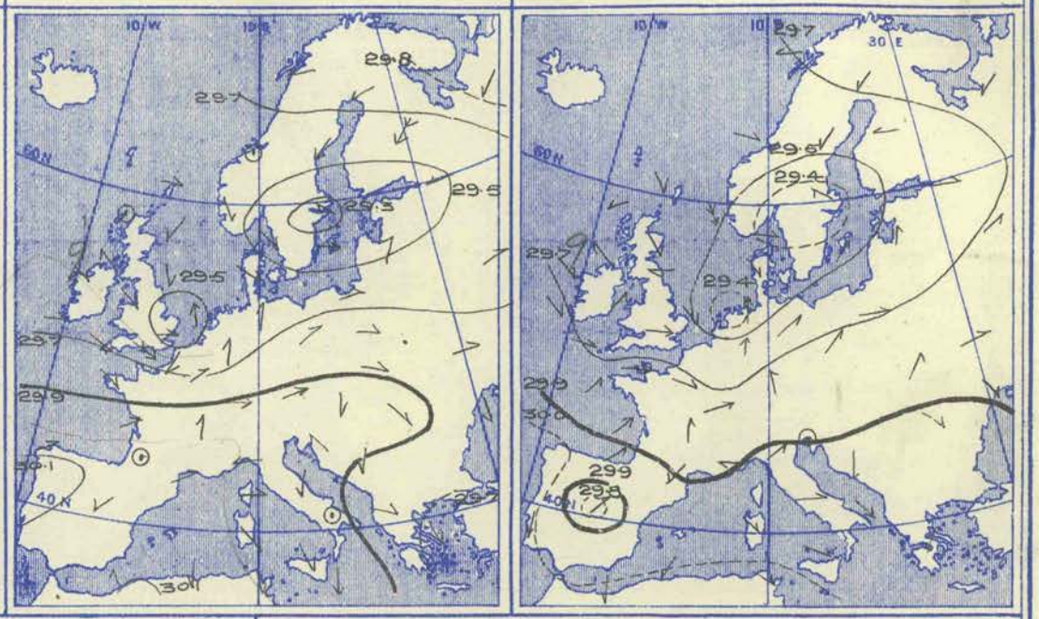
Temperature and Weather. 8 a.m.



Weather in morning still cloudy or dull over the greater part of our area, with rain in many British localities, in the north of France, the Netherlands, southern Scandinavia, the Gulf of Finland, and also at Christiansund. Remaining fine in the southern regions. Thunderstorms occurring later in different parts of France and the United Kingdom, and rather heavy rain falling at many stations in the more northern portion of our area. Heaviest amount 1·34 ins. at Rochefort.

Temperature changes slight and irregular. Readings at 8 a.m. ranging from 83° at Athens, 77° at Sfax, Barcelona, and San Fernando, and 73° at Genoa and Lesina, to 63° at Memel and Bodö, 61° in London and at Paris to 52° at Leith, and 49° at Nairn. Rising subsequently to 106° at Tunis, 97° at Madrid, 90° in Greece, and to above 80° in the extreme south generally, but only touching 62° at Oxford, 58° on the north-east coast of England, and 55° in the north of Ireland. Maxima at Bodö and Haparanda 68° and 66° repectively.

Barometer and Wind. 8 a.m. and 6 p.m.

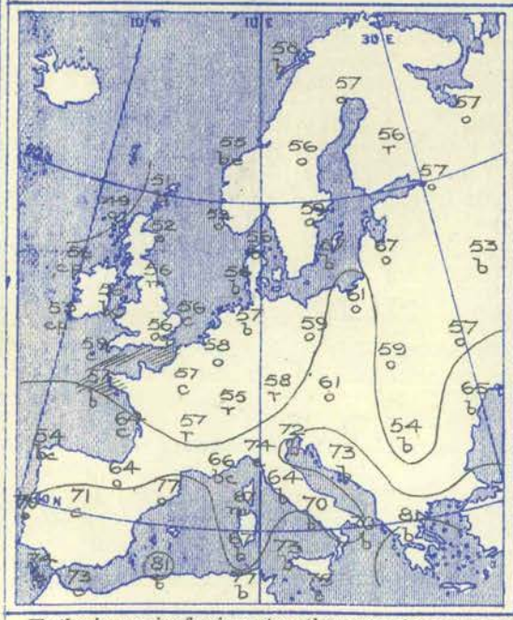


Wind in morning showing two distinct cyclonic circulations, one around Norfolk and Suffolk, and the other around the south of Sweden. Only moderate in force as a whole, but the North-Easterly wind blowing strongly at Hernösand and Kuopio, and the Westerly current over the English Channel strong to a gale in force. No general air current elsewhere. Cyclonic movement becoming transferred further to the eastward by evening, and a general decrease of force taking place.

Barometer low and the distribution of pressure still cyclonic. Morning readings ranging from above 30·0 ins. over the Iberian Peninsula and the western portion of the Mediterranean, and 29·89 ins. at Archangel to 29·67 ins. at Athens, below 29·5 ins. over the east and south-east of England, and to below 29·3 ins. over the south of Sweden. English depression moving on to the Netherlands later, and that over Sweden growing less deep. Barometer rising briskly in the extreme south-east of Europe; falling decidedly over central Spain.

Wednesday, 19th August, 1903.

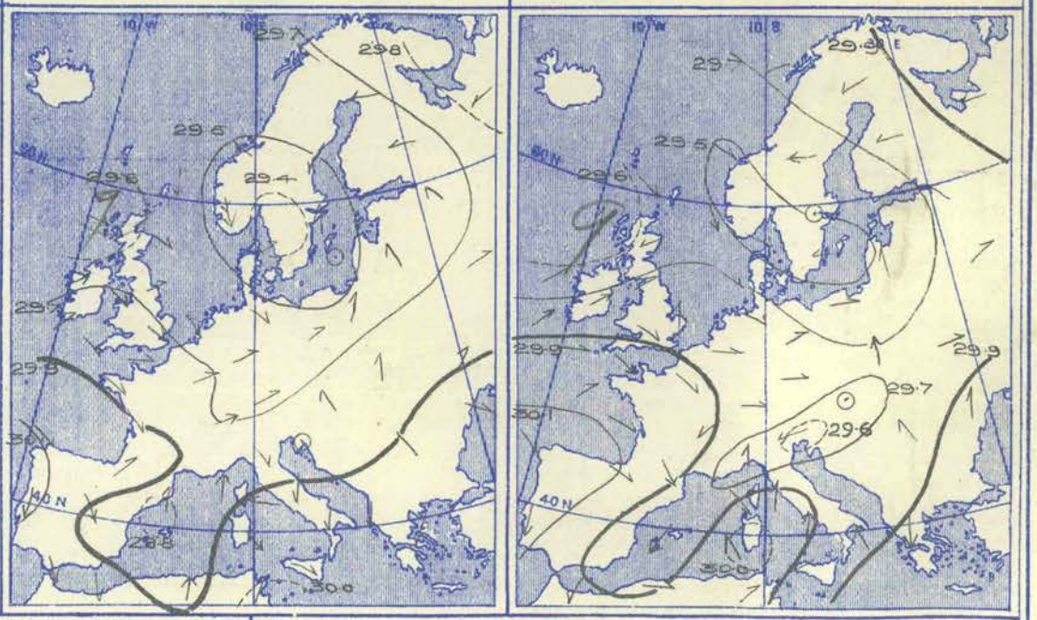
Temperature and Weather. 8 a.m.



Weather in morning fine in most southern countries and cloudy or overcast in the central and northern regions; showery in the west of Ireland, and rainy at Limoges, Lyons, and Belfort, as well as on the coast of North Germany, at Karlstad, and Kuopio. Rain falling later at most of our own stations, and over all the more northern parts of the Continent. Largest amounts, 1·5 ins. at Cracow and 1·4 ins. at Vienna. Sporadic thunderstorms occurring in France and the United Kingdom.

Temperature again showing no decided change. Morning readings highest, 81° at Patras and Algiers, 79° at Brindisi, 77° at Barcelona, 74° at Leghorn, 72° at Trieste, and 70° at Lisbon. Lowest, 49° at Stornoway, 51° at Sumburgh Head, 53° at Valencia (Ireland), Leith, and St. Petersburg, and 55° at Limoges and Belfort. Rising during day to 69° in London and at Paris, 80° at Perpignan, above that value in the south generally, to 90° at Athens, and to 99° at Algiers. Remaining below 60° at some Scotch and Irish stations.

Barometer and Wind. 8 a.m. and 6 p.m.

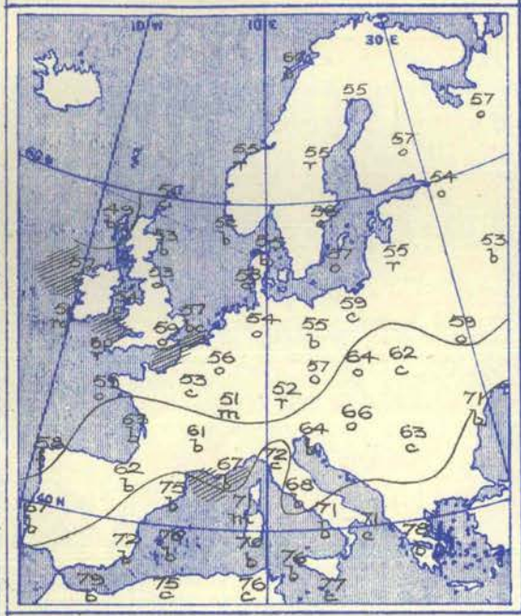


Wind at 8 a.m. circulating cyclonically round the Skager Rack. Northerly current blowing a gale at Skudesnaes, but very little force prevailing elsewhere. Another cyclonic movement of little strength around the south-eastern portion of the North Sea. Light breezes mainly from north-west or west general over southern Europe. Freshening South-Westerly winds setting in later on our north-west coasts, and an irregular cyclonic circulation of considerable strength appearing over the Riviera and northern Italy.

Barometer in morning ranging from about 30·1 ins. on the coast of Portugal, nearly 30·0 ins. in Greece, and 29·87 ins. at Archangel, to 29·8 ins. and less in a shallow depression near Barcelona, below 29·6 ins. in another system over and off the west of Scotland, and to less than 29·4 ins. over the Skager Rack and its vicinity. Latter system becoming complex by evening, and an irregularly shaped disturbance with rather steep gradients forming over Italy and the south-east of France. Barometer falling slowly on our own north-west coasts and rise ceasing at our south-western stations.

Thursday, 20th August, 1903.

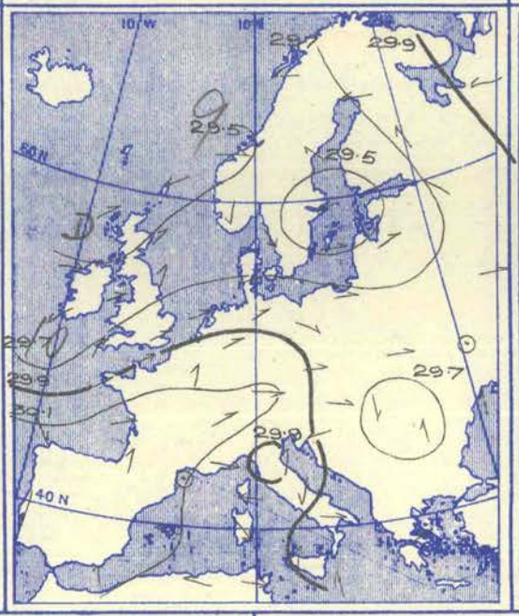
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine and bright over Scotland, Greece, at nearly all Spanish and Italian stations, but cloudy or overcast over Europe as a whole, with rain on our own south-western and western coasts and in various parts of Scandinavia, and thunder at Lorient. Rain falling later over the northern half of our area generally—as much as 2·6 ins. at Cherbourg, 1·8 ins. at Jersey, and 1·2 ins. at Lemberg and Fanö. Thunder and lightning experienced in the north-east of Scotland.

Temperature changed irregularly. Morning readings highest, 70° at Oran, 78° at Patras, 77° at Malta, 75° at Barcelona, and about 70° on the northern shores of the Black Sea. Lowest, (1) 49° at Stornoway, 50° at Wick and Malin Head; (2) 51° at Belfort, 52° at Munich, and 53° at Paris; (3) 53° at Moscow and 54° at St. Petersburg. Maxima during day as high as 93° at Madrid and Aumale, 89° at Palermo, 85° at Florence, and 82° at Nice and Biarritz. Below 70° over all the more northern regions, and only 63° in London and 60° at Nottingham. Below 60° on our north-western and northern coasts.

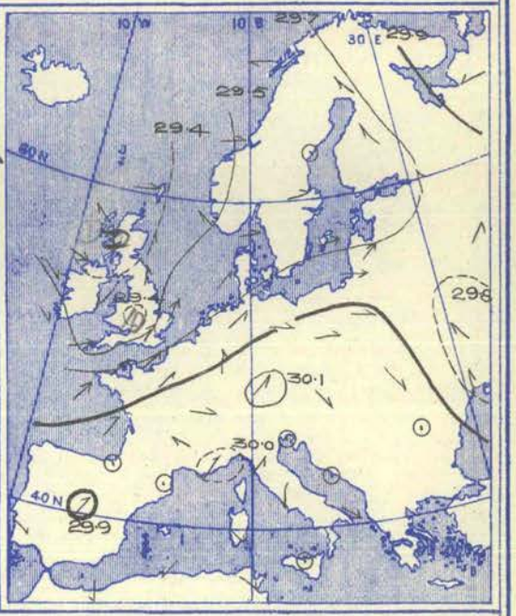
Barometer and Wind. 8 a.m.



Wind in morning showing several cyclonic circulations. Light or moderate in force generally, but strong in the Skager Rack and also at some of our western and north-western stations. Wind increasing to a slight gale from South-West over the English Channel during day, but veering to the North-Westward at most of our western stations.

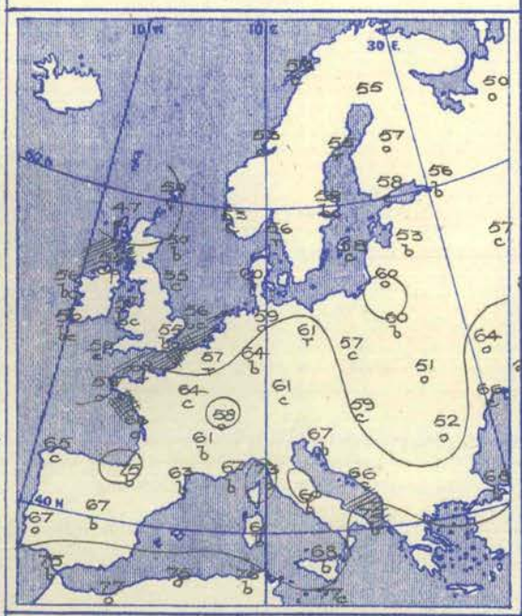
Barometer at 8 a.m. ranging from above 30·1 ins. in an area stretching from Spain to Munich to 29·9 ins. in a small minimum over the Gulf of Genoa, 29·7 ins. and less in another over Transylvania, and to below 29·5 ins. in two other systems—one over the south of Sweden and the other to the north-westward of our Islands. A small secondary shown over the south of Ireland. Latter becoming deeper later and moving briskly eastwards across England. Barometer falling decidedly over central Spain, and a depression appearing near Madrid.

Barometer and Wind. 6 p.m.



Friday, 21st August, 1903.

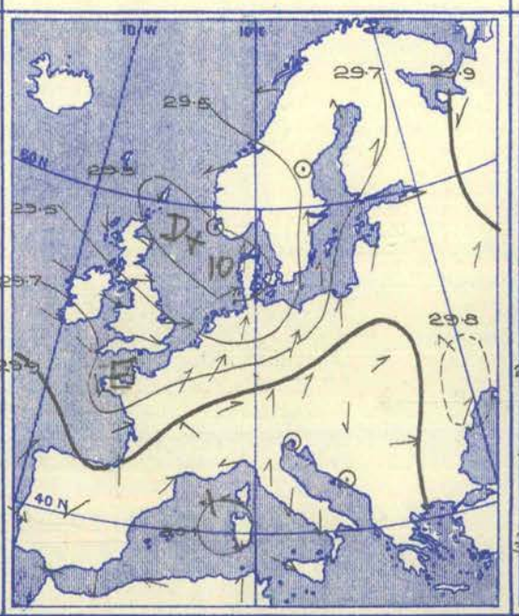
Temperature and Weather. 8 a.m.



Weather in morning cloudy or overcast over the major portion of our area, but fair in some parts of the United Kingdom and in the extreme south of Europe. Rain falling at Brussels, over the north of France, at Nairn and Hernösand. Rain experienced later in various parts of our Islands, France, Germany, Denmark, and Finland, and more than an inch at several stations in Scandinavia.

Temperature risen briskly over France, fallen decidedly over central Europe. Readings at 8 a.m. highest, 77° at Malta and over western Algeria, 75° at San Fernando, and 73° at Leghorn. Lowest, (1) 47° at Stornoway and Nairn, (2) 50° at Archangel, (3) 53° at Riga, and (4) 53° at Cracow. Maxima during day 66° in London, 75° at Paris, a little above or slightly below 80° over Italy and the central countries, to 90° at Tunis, and to 99° at Aumale.

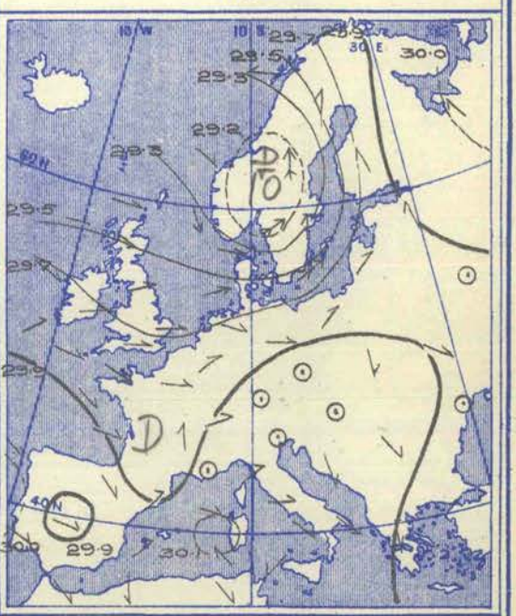
Barometer and Wind. 8 a.m.



Wind at 8 a.m. showing a cyclonic circulation around the northern portion of the North Sea; light or moderate in force generally, but fresh or strong on the southern side of the English Channel, over the Netherlands and north Germany. Light anticyclonic breezes prevailing over the Mediterranean, Italy, and Austria. Wind increasing to a strong gale from South-West and South over the south and west of Sweden, but decreasing in force over our Islands and the Netherlands.

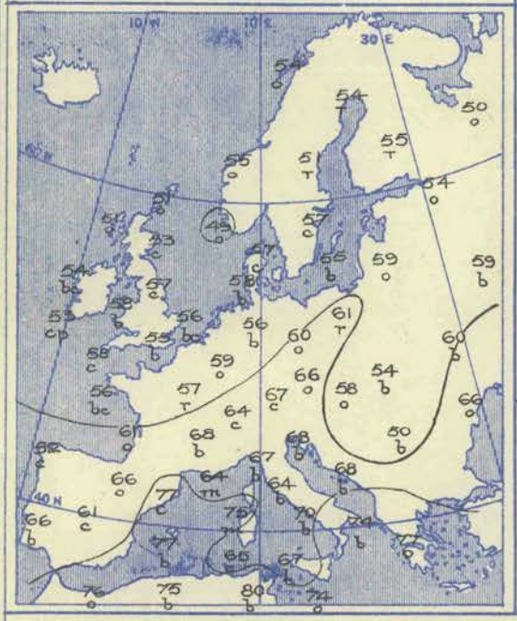
Barometer in morning highest, 30·0 ins. to 30·1 ins. in a large area embracing nearly all the Mediterranean and the adjacent territory. Lowest, 29·3 ins. and less in a rather complex depression stretching from Denmark to the westward of the Shetlands. No higher than 29·8 ins. in another system lying over the south-west of Russia. Northern depression travelling north-eastwards later and becoming deeper and less complex; that over Russia dispersing.

Barometer and Wind. 6 p.m.

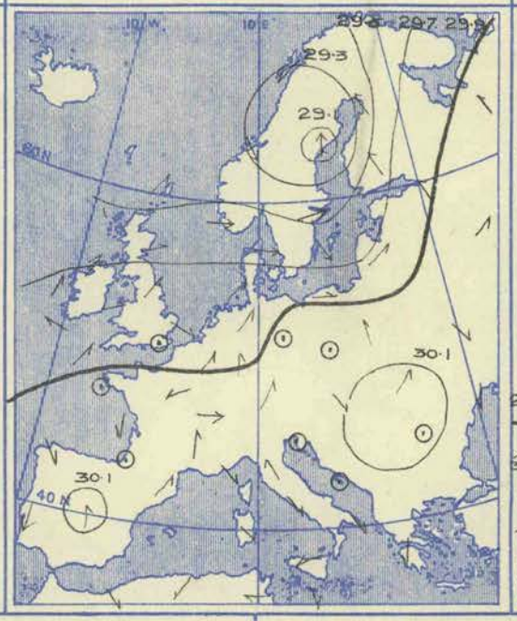


Saturday, 22nd August, 1903.

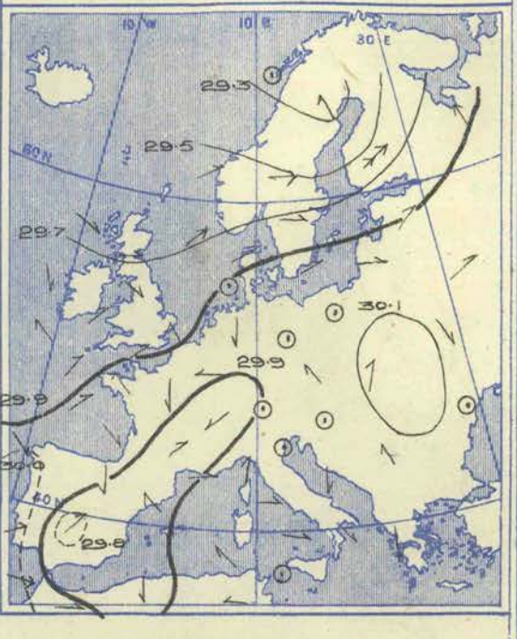
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning remaining fine and bright in Italy, the south-east of France, and the south of Austria, and also at some English and Irish stations. Cloudy or overcast generally, and rainy in various parts of France and northern Europe, as well as at Nairn; showers at Valencia Island. Showers or steady rain experienced later at many of our own western and northern stations, and thunder heard at Parsonstown. Rain also falling in France and several parts of northern Europe, accompanied in the former region by thunder and lightning. Lightning observed in London also.

Temperature showing no definite change. Morning readings ranging from 80° at La Calle, 77° at Patras and Barcelona, 74° at Brindisi, and 67° at Munich and Frankfort, to 51° at Nottingham, Parsonstown, Stornoway, and Sumburgh Head, 50° at Archangel, and 49° at Nairn. Rising during day to 63° in London, 60° at Spurn Head, to 80° or above in Italy, the south of France, and at some stations in central Europe, to 86° at Athens, 88° at Madrid, and to 93° at Tunis.

Wind at 8 a.m. showing a well-defined cyclonic circulation of strong winds or gales over Scandinavia, and light or moderate breezes—chiefly Westerly—over our Islands. Over all the more southern countries the wind was light and anticyclonic. Wind decreasing greatly in Scandinavia by evening. Very little change elsewhere.

Barometer fallen quickly over Sweden, risen in most other regions. Readings at 8 a.m. highest, 30·1 ins. and upwards over central Spain and also in Transylvania. Lowest, 29·1 ins. and less in a deep disturbance near Hernösand. Swedish depression travelling northwards later and apparently becoming less deep. Barometer falling slowly on our extreme south-west coasts, and quickly over the central parts of the Iberian Peninsula.

IV.—GENERAL NOTES, etc.

The general state of the weather during this week was again very unsettled over nearly the whole of Europe, but the worst features—cloudy or overcast skies, rather low temperature, and frequent, and, at times heavy, rain—were experienced in the northern and north-western countries. Thunderstorms occurred in various parts of France and the United Kingdom, but they were of a sporadic more than of a general character. In the far south the sky was clear or nearly so, and the temperature about equal to the mean. The distribution of barometic pressure was mainly cyclonic, the principal minima being found either over our Islands or Scandinavia. Others were, however, occasionally observed over or in the neighbourhood of the Mediterranean. Some of the northern systems were deep for the time of year, and the circulating wind currents fresh to very strong in force. Over the English Channel and in different parts of Scandinavia gales were again reported. At the end of the week the weather had improved over England, but this was due rather to the little rain-producing energy of the depressions in our neighbourhood than to any great amelioration in the pressure distribution.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 194.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	44·7	+18·2	43	+17·4
STRATHPEFFER SPA	27·6	+ 0·3	27	0
EDINBURGH	56·0	+23·7	55	+ 23
COCKLE PARK	55·0	—	54	—
NEWCASTLE-ON-TYNE	45·0	—	45	—
YORK	—	—	—	—
CROMER	46·4	—	46	—
LOWESTOFT	44·5	—	45	—
DUNMOW	42·7	—	43	—
SHEFFIELD	33·5	—	33	—
WORKSOP	33·2	+ 0·6	33	+ 1
THURCASTON	39·8	+ 3·4	40	+ 3
TUNBRIDGE WELLS	44·6	—	45	—
MARGATE	35·8	- 6·2	36	- 6
BROADSTAIRS	39·2	—	40	—
RAMSGATE	—	—	—	—
EASTBOURNE	44·6	- 1·2	45	- 1
BRIGHTON	47·8	- 0·5	48	- 1
WORTHING	50·6	—	51	—
BOGNOR	49·1†	—	50†	—
WATERGATE PARK	46·0	—	47	—
WESTBOURNE	48·1†	+ 1·7	49†	+ 2
VENTNOR HOSPITAL	48·0	+ 1·5	49	+ 2
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	40·5	- 0·4	41	0
SOUTHPORT	51·3	—	51	—
RHYL	48·5	—	48	—
ABERDOVEY	53·7†	—	54†	—
TENBY	56·8	+13·5	57	+ 14
TORQUAY	49·6	+ 2·9	50	+ 3
NEWQUAY	48·0	+ 1·5	49	+ 2
GUERNSEY	42·2†	-12·6	43†	- 13

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA :—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Vol. xx - No. 27 - p. 158	Glasgow	—	—	—	50·5	56·4	- 0·6	101	0	—	—	—	—	—	—	—
„ - „ 28 - p. 164	Spurn Head	—	—	—	—	—	—	—	—	3	0·46	+0·10	—	—	—	—
„ - „ - „	Newton Rigg	—	—	61·4	—	54·6	- 2·9	88	0	—	—	—	—	—	—	—
„ - „ - „	Birr Castle	—	—	—	—	—	—	—	—	—	2·02	+1·36	—	—	—	—
„ - „ 30 - p. 176	Newton Rigg	—	44	—	49·7	56·1	- 1·0	99	0	—	—	—	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 34.] *Third Series.* WEEK ENDING SATURDAY, AUGUST 29TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 200.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	68	39	59·4	47·5	53·1	1 below	78	− 4	0	− 1	1343	−123	491	− 48
	1. SCOTLAND, EAST	69	36	62·3	46·1	53·7	1 below	82	−13	0	0	1564	−199	502	− 81
	2. ENGLAND, N.E.	68	38	62·1	49·9	55·7	2 below	96	−11	0	0	1831	− 60	342	−137
	3. ENGLAND, EAST	73	41	65·6	51·2	58·0	1 below	112	− 6	0	0	2170	− 31	322	−203
	4. MIDLAND COUNTIES	69	38	62·6	49·1	55·5	3 below	95	−19	0	0	2033	−169	355	−180
	5. ENGLAND, SOUTH	72	37	64·9	52·2	58·2	2 below	113	−13	0	0	2285	−104	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	70	40	62·5	49·0	55·4	1 below	94	− 2	0	0	1773	− 87	317	− 96
	7. ENGLAND, N.W.	68	40	62·2	51·2	56·4	2 below	101	− 8	0	0	1963	− 61	259	−129
	8. ENGLAND, S.W.	68	40	62·8	51·4	56·7	2 below	103	−13	0	0	2215	− 19	162	−138
	9. IRELAND, NORTH	65	42	60·9	50·7	55·5	1 below	95	− 6	0	0	1813	−158	286	− 61
	10. IRELAND, SOUTH	68	42	63·2	51·0	56·8	1 below	104	− 5	0	0	2185	− 49	183	− 67
	— CHANNEL ISLANDS	72	50	65·0	55·0	59·7	2 below	124	− 9	0	0	2556	+ 32	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 200.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	21	11 more	167	+25	43·9	+15·3	29	+ 5	29	+ 5	791	− 86	24	− 3
	1. SCOTLAND, EAST	5	5	2 less	146	+23	25·2	+ 6·2	46	+14	47	+14	901	−101	28	− 3
	2. ENGLAND, N.E.	5	9	3 more	120	+ 7	17·7	+ 2·4	28	− 8	28	− 8	970*	− 81	30	− 3
	3. ENGLAND, EAST	4	9	4 more	107	− 7	19·6	+ 5·0	31	− 9	32	− 9	1115	− 89	35	− 3
	4. MIDLAND COUNTIES	5	14	8 more	117	+ 7	21·9	+ 4·9	21	−17	22	−17	965	− 79	30	− 3
	5. ENGLAND, SOUTH	5	11	5 more	121	+15	22·2	+ 5·8	35	− 9	36	−10	1187	− 26	38	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	6	20	9 more	153	+25	40·1	+10·9	36	+ 6	37	+ 6	1000	− 46	31	− 1
	7. ENGLAND, N.W.	5	11	3 more	140	+21	25·2	+ 5·2	29	− 2	30	− 2	1074	+ 35	34	+ 1
	8. ENGLAND, S.W.	5	16	8 more	135	+14	28·7	+ 6·2	29	−13	30	−13	1159	− 95	37	− 3
	9. IRELAND, NORTH	7	13	4 more	171	+26	29·3	+ 7·5	25	− 3	26	− 3	865	− 97	27	− 3
	10. IRELAND, SOUTH	7	13	5 more	154	+23	31·6	+ 7·0	30	− 4	31	− 4	975	−112	31	− 4
	— CHANNEL ISLANDS	6	10	4 more	144	+22	22·1	+ 3·9	45	− 7	47	− 7	1372	− 70	44	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week continued in a very unstable and rainy condition in all districts, and the intervals of clear or partially clear sky were few except in Scotland. Thunderstorms were experienced in some localities—mostly during the earlier part of the week.

Temperature was again below the mean, the deficit being 1° or 2° as a rule, but 3° in the Midland Counties. The majority of the maxima were recorded on the 27th, and ranged from 73° in England E. and 72° in England S. and the Channel Islands to 65° in Ireland N. The lowest of the minima were registered during the earlier days of the week, when the thermometer fell to 36° in Scotland E. and to 40° or below in all other districts of Great Britain to 42° in Ireland, and to 50° in the Channel Islands. Both on the 23rd and 25th the reading on the grass at Fort William was 32·4°.

Rainfall was much more than the mean in nearly all districts, but was less in Scotland E. Several falls of an inch or more were recorded, especially in the north and north-west and over central and eastern England. On Tuesday at Nottingham there was as much as 2·76 ins.

Bright Sunshine was deficient in Ireland and England, but exceeded the normal over Scotland. The percentage of the possible duration ranged from 47 in the Channel Islands and Scotland E. to 36 in England S., 26 in Ireland N., and to 22 in the Midland Counties.

Barometer and Wind. Several depressions again passed over or in the immediate neighbourhood of our Islands, and caused the general direction of the wind to be South-Westerly or Westerly, but at times it showed a complete cyclonic circulation, backed to the Southward or South-Eastward, or veered to the North-Westward or Northward. The earlier half of the week was marked by a depression, which at first moved in an erratic manner over our south-western districts and subsequently east-north-eastwards or north-eastwards directly across the Kingdom and the North Sea, while during the latter part of the time the centre of larger and deeper disturbances travelled East-North-Eastwards off our north-western and northern coasts on their way to Scandinavia. The latter produced strong winds or gales over our north-western coasts, while the former was attended by strong breezes or moderate gales.

307 | 70 219 | 90 Wy. & S. Ltd. 12 | 02

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit. Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	59	45	54·3	47·9	50·9	− 1·3	62	0	5	1·39	+ 0·62	*	*	*	*
	Stornoway	64	45	60·3	48·4	54·0	+ 0·6	84	0	5	2·61	+ 1·74	32·7	+ 4·5	33	+ 5
	Wick	64	39	59·1	46·3	52·3	− 1·6	72	0	6	0·80	+ 0·20	*	*	*	*
	Lairg Ⓢ	68	43	63·2	46·7	54·5	+ 0·8	88	0	5	1·20	+ 0·54	*	*	*	*
	Glencarron Ⓢ	61	43	57·4	46·7	51·7	− 2·0	68	0	6	3·90	+ 2·30	*	*	*	*
	Fort Augustus Ⓢ	66	39	60·8	48·5	54·3	− 1·2	86	0	4	1·50	+ 0·71	22·7	+ 3·3	23	+ 3
	Fort William	64	42	60·6	48·2	54·0	− 1·9	84	0	5	3·11	+ 1·67	32·8	+ 10·3	33	+ 10
1. SCOTLAND, E.	Nairn	66	43	62·1	47·9	54·6	− 0·7	88	0	5	0·40	− 0·20	*	*	*	*
	Aberdeen	69	40	62·0	46·3	53·7	− 1·4	82	0	2	0·22	− 0·45	53·6	+ 20·8	54	+ 21
	Braemar Ⓢ	63	36	59·6	42·3	50·4	− 1·8	59	0	6	0·77	− 0·06	*	*	*	*
	Ochtertyre Ⓢ	69	38	64·6	44·1	53·7	− 2·3	82	0	5	0·58	− 0·26	*	*	*	*
	Leith	69	42	64·3	49·4	56·4	− 0·8	101	0	6	0·66	+ 0·09	*	*	*	*
	Marchmont Ⓢ	64	41	61·0	46·7	53·4	− 1·5	80	0	5	0·61	− 0·16	39·3	+ 6·8	40	+ 7
2. ENGLAND, N.E.	Alnwick Castle	68	43	62·9	48·7	56·4	− 0·4	94	0	5	0·51	− 0·17	*	*	*	*
	Durham	64	38	61·4	48·1	54·4	− 2·5	87	0	4	0·41	− 0·17	27·5	− 3·9	28	− 4
	Shields	67	45	62·4	50·1	55·9	− 0·6	97	0	6	0·53	− 0·07	*	*	*	*
	Scarborough Ⓜ	65	40	61·6	48·1	54·5	− 2·9	88	0	6	0·74	+ 0·14	29·7	—	30	—
	Spurn Head	66	50	62·3	53·4	57·6	− 0·9	109	0	5	1·54	+ 1·12	*	*	*	*
	Fulbeck (Lincolnshire)	67	46	61·8	51·1	56·1	− 2·0	99	0	5	1·41	+ 0·86	22·5	—	23	—
3. ENGLAND, E.	Hillington Ⓜ	69	42	64·5	49·0	56·3	− 2·6	100	0	4	2·14	+ 1·52	25·4	− 12·2	26	− 13
	Yarmouth	72	45	65·3	51·4	57·9	− 1·6	111	0	4	0·71	+ 0·17	*	*	*	*
	Geldeston	73	43	67·0	49·3	57·6	− 1·6	109	0	4	0·59	+ 0·12	36·4	− 4·6	38	− 5
	Cambridge	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Felixstowe	71	47	66·6	53·4	59·6	+ 0·4	123	0	4	0·69	—	35·3†	—	36†	—
	Rothamsted	68	41	63·8	49·6	56·3	− 2·3	100	0	6	0·97	+ 0·41	31·8	− 8·5	33	− 9
	Shoeburyness	70	48	66·6	54·3	60·1	− 0·3	127	0	3	0·19	− 0·23	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	65	42	61·3	48·7	54·6	− 2·1	88	0	5	0·48	− 0·19	27·4	—	28	—
	Bawtry (Hesley Hall)	69	40	64·0	49·0	56·1	− 2·0	99	0	4	0·84	+ 0·30	*	*	*	*
	Nottingham	67	43	62·7	48·4	55·1	− 3·5	92	0	4	2·92	+ 2·35	20·1	—	21	—
	Loughborough	68	43	63·0	49·3	55·7	− 3·5	96	0	4	1·63	+ 1·06	*	*	*	*
	Colly Weston (Stamford)	69	45	64·1	49·9	56·6	− 2·8	102	0	6	1·33	+ 0·79	*	*	*	*
	Cheadle Ⓜ	65	46	60·2	49·1	54·3	− 2·1	86	0	5	0·96	+ 0·19	*	*	*	*
	Birmingham (Edgbaston)	65	47	61·3	50·5	55·6	− 2·4	95	0	4	1·51	+ 0·88	22·5	—	23	—
	Churchstoke Ⓜ	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	66	40	62·2	49·0	55·2	− 3·6	92	0	6	2·01	+ 1·46	*	*	*	*
	Cirencester	65	38	63·1	46·9	54·5	− 2·9	88	0	5	0·99	+ 0·29	18·3	− 20·2	19	− 21
	Oxford	66	42	64·4	50·1	56·8	− 2·8	104	0	4	0·89	+ 0·35	23·2	− 16·4	24	− 17
5. ENGLAND, S.	London	72	45	66·9	51·7	58·8	− 2·0	118	0	5	1·61	+ 1·09	30·6‡	− 6·0‡	32‡	+ 6‡
	Swarraton (Alresford) Ⓜ	66	37	64·5	48·4	56·0	− 1·9	98	0	4	1·13	+ 0·48	*	*	*	*
	Dungeness	71	46	66·0	54·3	59·8	− 1·1	125	0	5	0·43	− 0·04	39·6	..	41	—
	Hastings (St. Leonards)	67	47	64·3	52·9	58·3	− 2·5	114	0	5	0·55	− 0·02	39·8	− 5·4	42	− 6
	Southampton	69	44	67·6	51·9	59·3	− 1·7	121	0	5	1·02	+ 0·40	37·5	− 6·6	39	− 7
	Portland Bill	65	52	63·6	55·3	59·2	− 1·0	120	0	5	1·62	—	*	*	*	*
	Shaftesbury Ⓜ	63	48	61·6	51·0	56·0	− 2·8	98	0	4	1·39	+ 0·71	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	65	40	62·6	47·7	54·7	− 1·3	89	0	7	3·13	+ 1·77	*	*	*	*
	Glasgow	70	43	62·8	49·7	55·9	+ 0·2	97	0	6	1·26	+ 0·36	39·5	+ 12·2	40	+ 12
	Cally Ⓢ	70	45	64·4	48·3	55·9	+ 0·4	97	0	6	1·02	− 0·03	*	*	*	*
	Aspatria	66	44	62·1	49·6	55·5	− 0·5	95	0	6	3·04	—	32·1	—	33	—
	Douglas (Isle of Man)	64	45	60·6	49·7	54·8	− 1·5	90	0	7	1·38	+ 0·51	36·3	− 0·4	37	0
7. ENGLAND, N.W.	Newton Rigg	66	40	62·3	47·2	54·3	− 1·3	86	0	5	1·35	—	31·3	—	32	—
	Stonyhurst	63	43	60·1	50·7	55·1	− 1·8	92	0	6	2·04	+ 0·87	25·9	− 5·9	26	− 6
	Blackpool Ⓜ	67	44	62·6	52·1	57·0	− 1·2	105	0	6	1·25	+ 0·47	30·4	− 2·4	31	− 3
	Manchester (Prestwich)	67	43	62·1	49·3	55·3	− 1·9	93	0	4	1·01	+ 0·16	24·2	—	25	—
	Liverpool Obsy. (Bidston)	65	48	62·1	52·4	57·0	− 1·8	105	0	5	0·49	− 0·18	—	—	—	—
	Chester (Hawarden Bridge)	68	49	64·4	52·8	58·3	− 0·7	114	0	2	0·24	—	*	*	*	*
	Llandudno Ⓜ	67	49	63·3	52·3	57·5	− 1·7	109	0	5	0·98	+ 0·33	35·4	+ 0·9	37	+ 1
	Holyhead	64	50	61·0	53·0	56·8	− 1·5	104	0	7	1·02	+ 0·34	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	62	50	60·0	54·4	57·0	− 1·5	105	0	6	1·59	+ 0·91	24·4	− 16·7	25	− 17
	Clifton	—	—	—	—	—	—	—	0	—	—	—	*	*	*	*
	Bath	66	42	65·0	50·3	57·2	− 2·9	106	0	6	1·55	+ 0·90	26·4	—	27	—
	Arlington (N. Devon)	63	46	62·1	49·9	55·6	− 2·2	95	0	5	2·21	+ 1·06	*	*	*	*
	Cullompton Ⓜ	68	40	65·0	48·8	56·4	− 2·5	101	0	4	1·02	+ 0·35	24·3	− 15·0	25	− 16
	Falmouth	64	50	61·8	52·4	56·8	− 2·7	104	0	5	1·51	+ 0·66	36·1	− 9·2	38	− 10
	Plymouth	65	43	62·8	52·3	57·2	− 2·8	106	0	6	1·47	+ 0·79	34·5	− 7·7	36	− 8
9. IRELAND, N.	Malin Head	61	49	59·4	52·0	55·5	− 1·3	95	0	6	0·83	+ 0·09	*	*	*	*
	Edenfel (Omagh)	63	44	61·4	50·1	55·4	+ 0·1	94	0	7	1·46	+ 0·62	*	*	*	*
	Blacksod Point	62	52	59·7	54·3	56·8	− 0·6	104	0	7	1·90	+ 0·77	*	*	*	*
	Markree Castle	65	43	61·7	48·4	54·7	− 1·2	89	0	7	1·66	+ 0·73	22·9	− 5·1	23	− 5
	Armagh	65	42	62·0	48·5	54·9	− 1·4	90	0	6	1·25	+ 0·52	27·7	− 0·3	28	0
	Donaghadee	65	46	61·4	50·6	55·7	− 1·0	96	0	7	0·61	− 0·12	*	*	*	*
10. IRELAND, S.	Dublin	67	47	64·3	51·8	57·7	− 0·7	110	0	7	0·92	+ 0·27	28·6	− 7·0	30	− 7
	Birr Castle	65	42	61·9	49·4	55·3	− 1·8	93	0	7	1·76	+ 0·95	28·1	− 2·9	29	− 3
	Kilkenny	67	44	62·6	50·0	55·9	− 2·1	97	0	6	1·38	+ 0·63	*	*	*	*
	Waterford	68	47	63·4	50·7	56·7	− 1·3	103	0	7	1·96	+ 1·14	*	*	*	*
	Roche's Point	65	45	63·6	51·4	56·9	− 2·0	104	0	6	0·97	+ 0·10	*	*	*	*
	Valencia	68	43	62·7	52·3	57·2	− 1·2	106	0	6	1·52	+ 0·44	32·6	− 0·8	34	− 1
	Killarney	68	43	64·8	51·2	57·6	− 0·4	109	0	7	0·81	− 0·23	*	*	*	*
	Foynes	—	—	—	—	—	—	—	—	6	1·33	+ 0·44	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	53	62·9	55·1	58·8	− 1·5	118	0	6	1·24	+ 0·64	39·1	− 10·7	41	− 11
	Jersey	72	50	67·1	54·9	60·6	− 1·6	130	0	6	0·68	+ 0·09	48·8	− 3·4	51	− 4

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

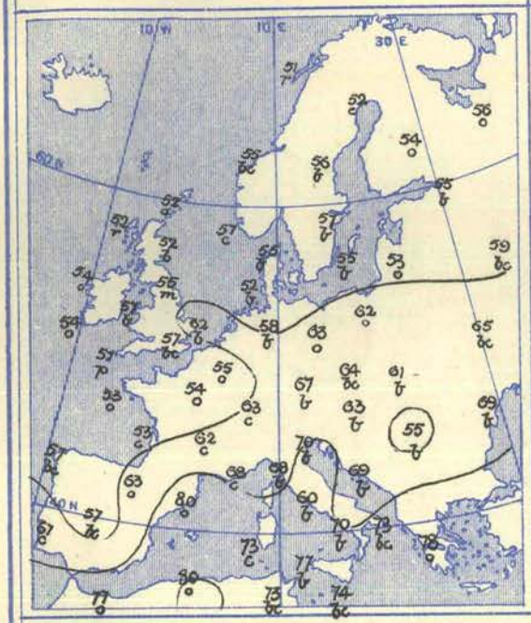
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

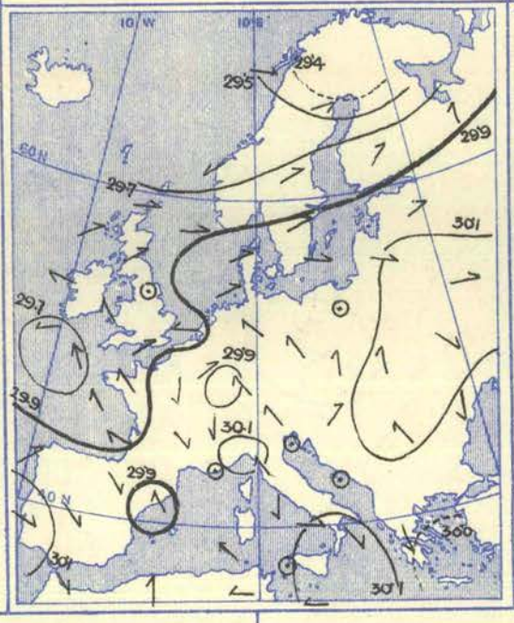
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 23rd August, 1903.

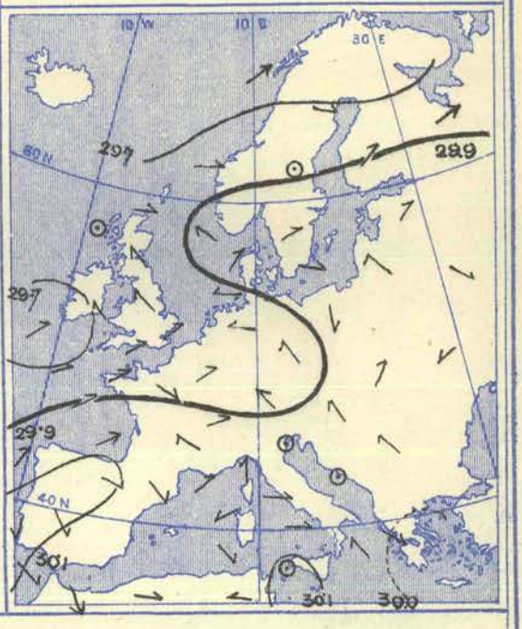
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the major portion of our area, but cloudy or overcast in the west of France and the west and north-west of our Islands, as well as in the north-west of Scandinavia and over Finland. Rainy at Stornoway and showery at Scilly. Rain falling at most of our own stations by night—as much as 0·6 in. at Pembroke and 1·4 ins. at Portland Bill. Heavy falls also occurring at various stations in France, in Germany and Denmark. Thunder experienced at Roche's Point and thunderstorms in the east of France.

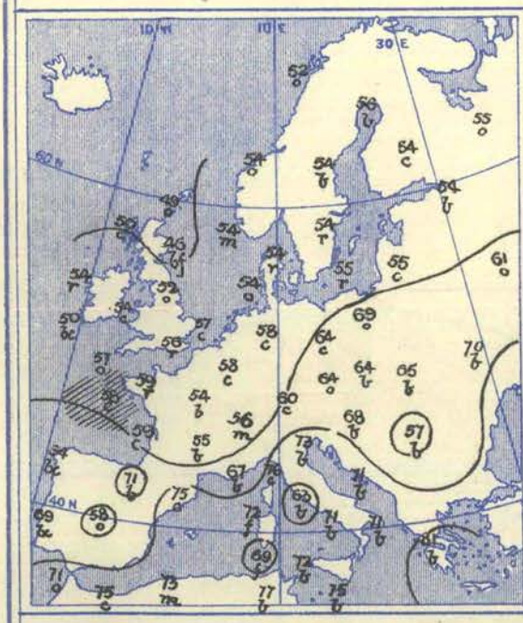
Temperature at 8 a.m. highest, 80° at Algiers and Barcelona, 78° at Athens, 70° at Trieste, 66° at Breslau, and 61° at Memel. Lowest, (1) 49° at Nottingham, (2) 51° at Le Mans, (3) 52° at Parsonstown, (4) 51° at Bodö and 52° at Haparanda. Rising later to 66° at our own southern stations, 68° at Hernösand, to above 75° over the southern half of Europe generally, and to above 80° in the extreme south. Highest readings of all, 88° in Greece and at Perpignan and San Fernando, 99° at Tunis, and 110° at La Calle.

Wind in morning light and anticyclonic over Russia and the central countries, but several partial cyclonic circulations prevailing elsewhere. Westerly and South-Westerly winds strong over Scandinavia and Finland, and South-Easterly winds fresh on our own south-west coasts. No great change in direction later, but force becoming lighter in nearly all places.

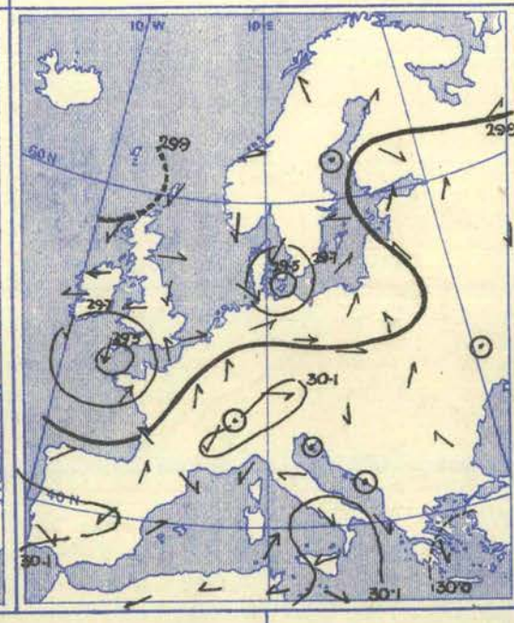
Barometer at 8 a.m. highest, above 30·1 ins. (1) in an irregularly-shaped anticyclone over Russia, (2) in another system extending over Portugal from the westward, and (3) in smaller systems over the Mediterranean. Lowest, 29·4 ins. and less in a depression over Lapland, but as low as about 29·6 ins. in another disturbance off our own south-west coasts. Northern depression disappearing by evening, and that off our south-west coasts moving northwards to Ireland. South-western anticyclone spreading northwards towards our south-west coasts; that in Russia giving way somewhat.

Monday, 24th August, 1903.

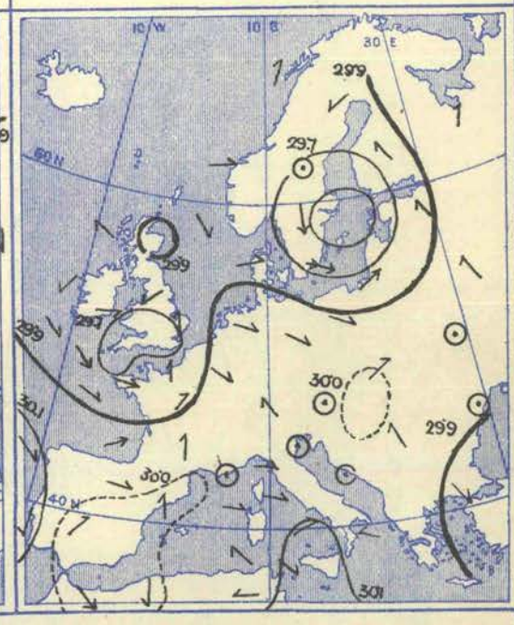
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in all the more eastern and southern regions of Europe, and cloudy or dull over our Islands, the west of Norway, Denmark, and the Baltic. Rain falling at most English and Danish stations, as well as in the south of Sweden. Rain very heavy and continuous subsequently over the central and eastern counties of England, the north-east of France, and the south of Scandinavia, and more than an inch falling at Constantinople. Largest amounts in our Islands, 1·2 ins. at Spurn Head, 1·3 ins. in London, and 2·8 ins. at Nottingham. Thunder and lightning over the south and east of England.

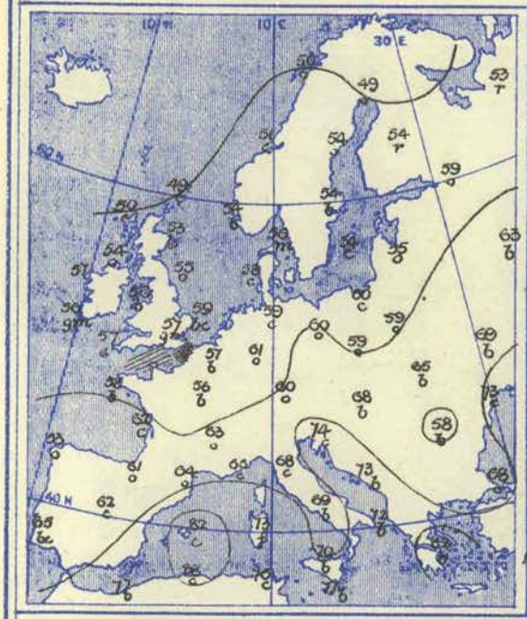
Temperature at 8 a.m. ranging from 81° at Athens, 77° at La Calle, and 75° at Malta and Barcelona, to below 60° over the United Kingdom, Scandinavia, and Denmark, to 50° at Parsonstown and Wick, and to 48° at Aberdeen. Maxima during day 66° in London, above 70° over Germany, and above 80° in several parts of southern Europe. Highest readings, 88° at Cagliari, Palermo, and Algiers, and 97° at Athens.

Wind at 8 a.m. showing two distinct cyclonic circulations—one around Cornwall and the other over the Baltic and its neighbourhood. Fresh or strong in force in many places, and the South-South-Easterly wind at Jersey blowing a gale. Both movements becoming transferred further east by evening, and a Westerly gale springing up in Gothland.

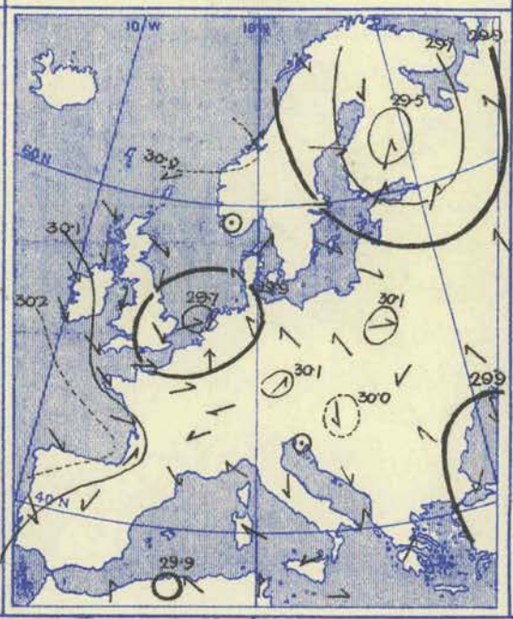
Barometer in morning highest, about 30·1 ins. over the greater portion of Russia and in two smaller areas in various parts of southern Europe. Lowest, 29·5 ins. and less in two well-defined minima—one over the extreme south of Sweden and the other over Cornwall. Both depressions travelling east-north-eastwards later, and barometer falling at all but our most western stations; a fall also commencing in the neighbourhood of the White Sea.

Tuesday, 25th August, 1903.

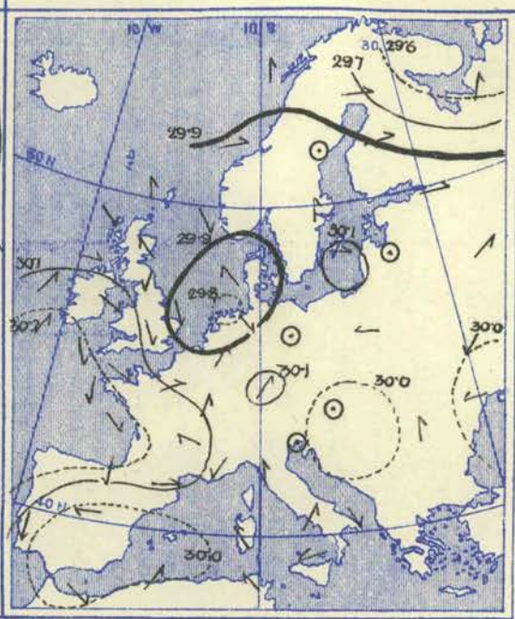
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull generally, but fine in several parts of southern and south-eastern Europe, as well as at some Irish stations. Rainy over England, the north-east of France, and Finland. Rain falling later in most northern and central countries—heaviest amounts 0·8 in. at Skagen and 1·0 in. at Munich. A thunderstorm occurring at the mouth of the Elbe.

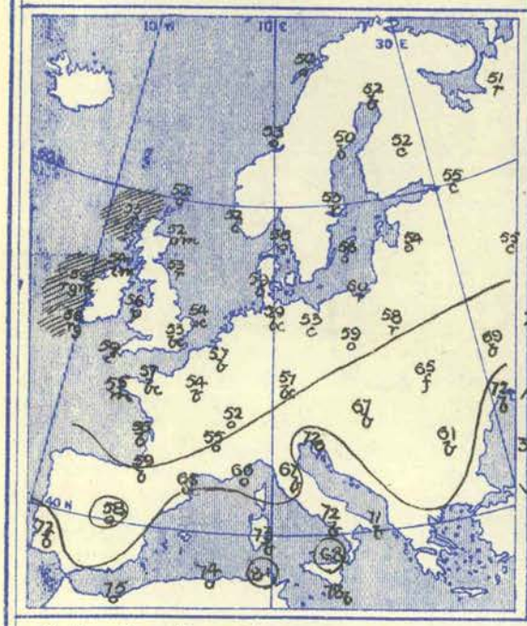
Temperature changed irregularly. Readings at 8 a.m. highest, 88° at Algiers, 82° at Athens, 77° at Malta, 74° at Trieste, and 73° at Odessa. Lowest, 49° at Haparanda and Sumburgh Head, 52° at Parsonstown, 54° at Oxford, and 56° at Paris. Rising during day to 102° at Tunis, 90° at Palermo, 88° at Rome, and to 80° or above in the south generally. Failing to reach 70° over the northern parts of France, and remaining below 60° in several British localities, including the Metropolis.

Wind at 8 a.m. still showing two complete cyclonic circulations—one over Finland and northern Europe, the other around the southern portion of the North Sea. Northerly current fresh on our west coasts, and a South-Westerly gale prevailing at Cape Gris Nez. Light and variable airs prevalent over the Mediterranean and the southern and central countries. Northern cyclonic movement giving place to Westerly winds by evening, but that around the North Sea continuing.

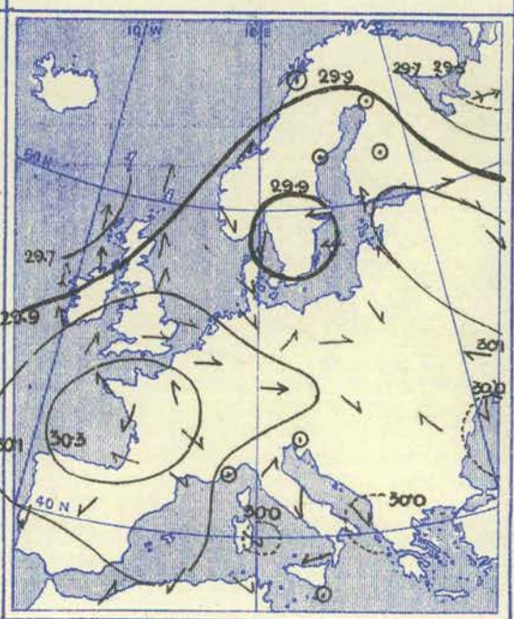
Barometer risen decidedly in the most western regions. Morning readings ranging from 30·2 ins. in an anticyclone approaching the Bay of Biscay from the westward, to 29·9 ins. and less, over the Black Sea, to less than 29·7 ins. in the centre of a depression off the coast of Norfolk, and to about 29·4 ins. in another system over Finland. Latter moving away northwards later, and that off Norfolk travelling slowly to Holland. Anticyclone moving eastwards to the west of France and spreading northwards to Ireland.

Wednesday, 26th August, 1903.

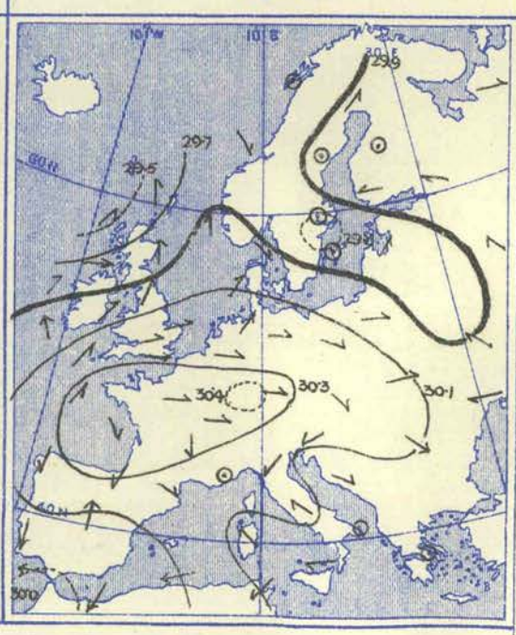
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine over the greater part of the southern countries, and cloudy or overcast in nearly all other regions. Rain at many of our own northern and western stations, in the south of Sweden, East Prussia, and at Warsaw. Fog prevailing at some inland French stations. Rain falling later in most parts of the United Kingdom, over Finland, at Moscow, and St. Petersburg. Nearly three-quarters of an inch at some Irish stations and more than an inch at Stornoway and Sumburgh Head.

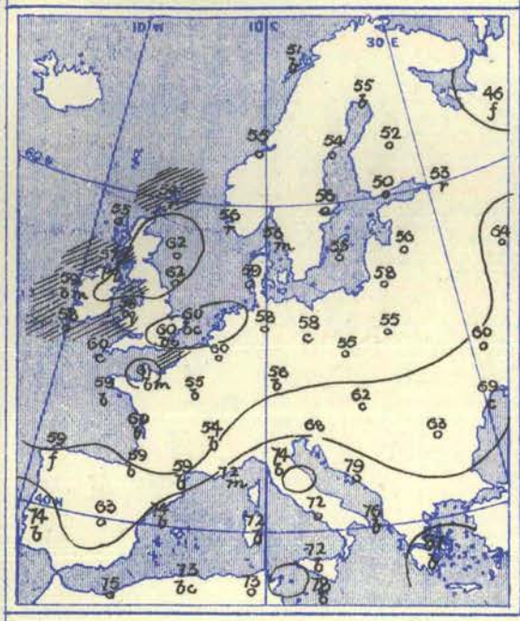
Temperature fallen generally. Readings in morning highest, 81° at La Calle, 78° at Oran and Malta, 72° at Lisbon and Barcelona, Naples, Trieste, and Odessa, and 69° at Kiev. Lowest, (1) 48° at Limoges, 50° at Le Mans, (2) 50° to 52° over central England, (3), 50° at Bodó and Hernösand, and 51° at Archangel. Rising later to 68° in London, above 70° at some German stations, and to 80° or above in Austria and the southern countries. Highest readings, 88° at San Fernando, 91° at Athens, 93° at Palermo, and 97° at Aumale. Maxima, below 60° at Nottingham and Holyhead.

Wind at 8 a.m. light and anticyclonic over France and its neighbourhood, and strong to a gale from the Southward on our own western and north-western coasts. A moderate or light cyclonic circulation shown around the south of Sweden, and a fresh Westerly gale at Archangel. Very little change later, but a moderate Easterly gale springing up at San Fernando, and gale at Archangel subsiding.

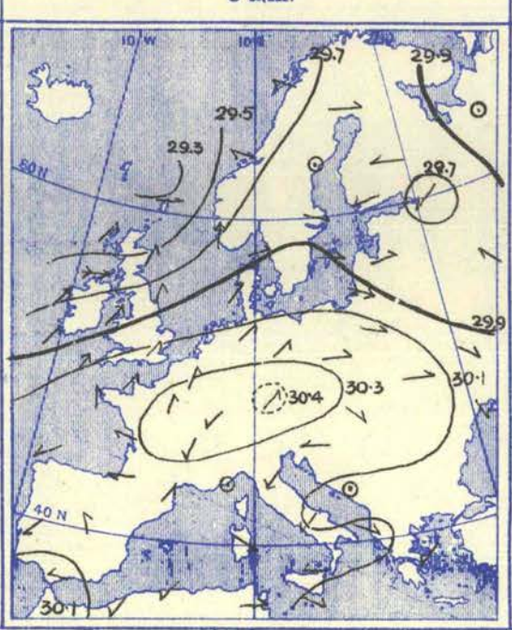
Barometer in morning ranging from above 30·3 ins. in an anticyclone over the Bay of Biscay and France to about 29·3 ins. in a depression over the south of Sweden, and to about 29·6 ins. in two other systems—one off our north-west coasts, and the other in the extreme north of Russia. Anticyclone spreading eastwards later and disturbance off our coasts moving north-eastwards; that in the extreme north disappearing quickly. A fresh fall of the mercury commencing on our south-west coasts.

Thursday, 27th August, 1903.

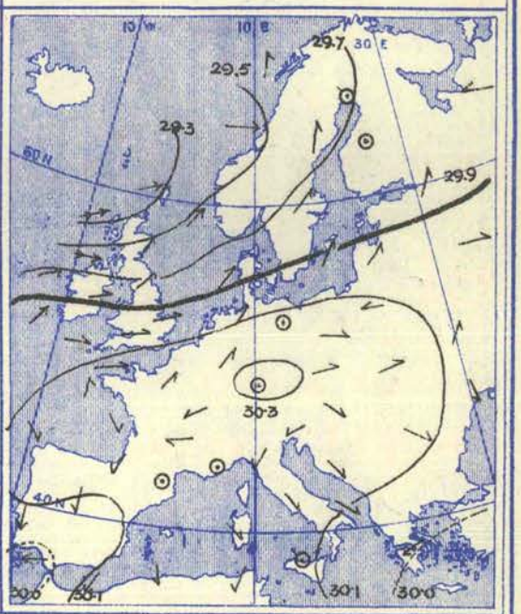
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in the north of Scandinavia, the south of England, over France and southern Europe; cloudy or overcast elsewhere, with rain in Finland, the south-west of Norway, and in Ireland. Fog prevailing at Corunna, Limoges, and Archangel. Rain becoming general over the most northern and north-western countries later—heaviest amounts 0·5 in. at Leith and 0·6 in. at Stockholm.

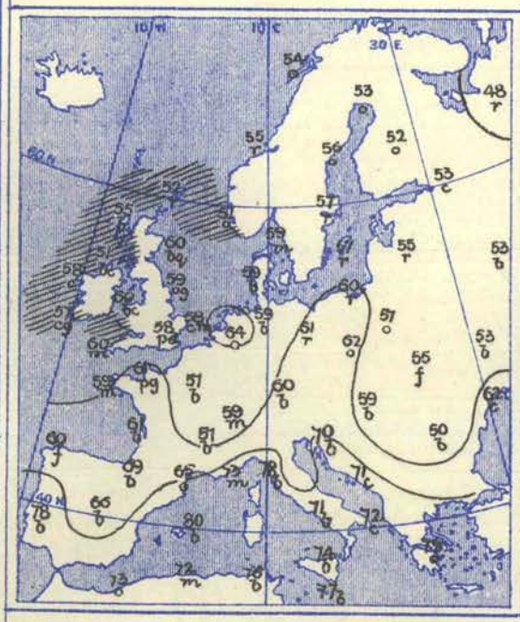
Temperature risen over the Iberian Peninsula, the west of France, the United Kingdom and Scandinavia; fallen elsewhere. Readings at 8 a.m. highest, 87° at Athens, 79° at Lésina, 76° at Oporto, 74° at Florence, and 73° at Nicolaieff. Lowest, (1) 46° at Archangel, (2) 50° at Hangö, (3) 50° at Limoges and 54° at Lyons. Maxima during day 72° at Yarmouth and in London, and several degrees higher in most parts of France and central Europe. Thermometer rising to 87° at Rome, 88° at Madrid, and to 99° at Athens and Aumale.

Wind at 8 a.m. strong to a gale from the South-Westward on our north-west coasts, and fresh from the same quarter in other parts of our Islands. A complete cyclonic circulation of light to strong winds over Russia, and a light anticyclonic movement over all the central countries. No great modification later as a whole, but Russian cyclonic circulation entirely disappearing by evening.

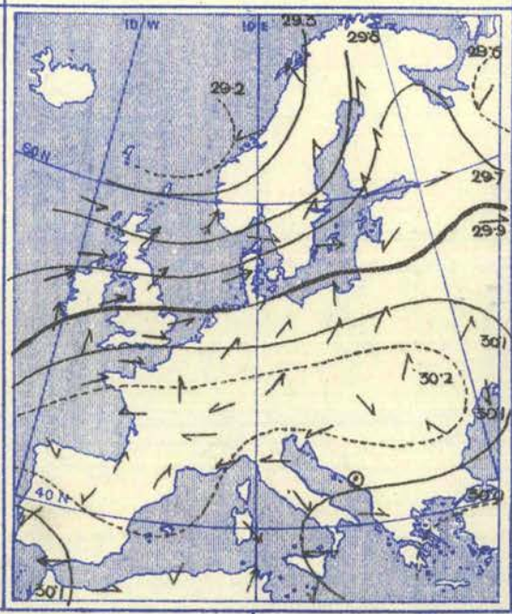
Barometer in morning ranging from 30·3 ins. to 30·4 ins. in an anticyclone extending from the west coast of France to Cracow, to about 29·6 ins. in a shallow depression near St. Petersburg, and 29·3 ins. and less in a deeper system near the Shetlands. Gradients rather steep over our Islands and the North Sea. A fresh fall of the barometer taking place on our north-west coasts later, and gradients over our Islands becoming steeper. Russian depression dispersing.

Friday, 28th August, 1903.

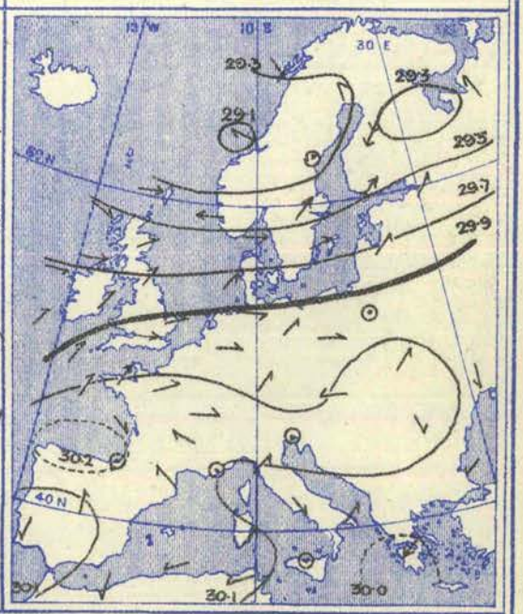
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull over northern Europe, with rain in several places, especially over the Baltic and Gulf of Finland. Fine and bright in almost all southern regions, but fog prevailing at Corunna. Rain falling over all the northern countries during the ensuing twenty-four hours—as much as 0·6 in. at Haparanda and Christiansund, and 0·8 in. at the Helder.

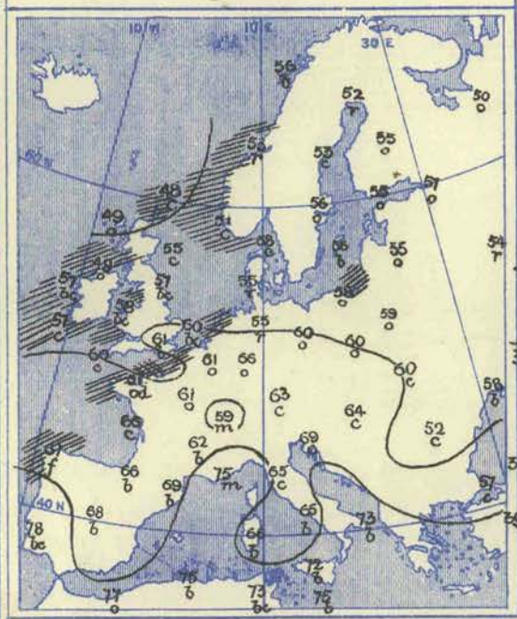
Temperature fallen in our Islands, risen at most Continental stations. Morning readings highest, 80° at Palma, 79° at Barcelona, 78° at Athens and Lisbon, and above 70° in the south generally. Lowest, (1) 48° at Archangel, (2) 50° at Hermanstadt, (3) 52° at Sumburgh Head, and (4) 55° at Le Mans. Rising subsequently to 68° or 69° in the south-east of England, to above 70° in Germany and Austria-Hungary, and to above 80° in the extreme south. Highest values, 93° at Tunis and Patras, and 100° at Madrid.

Wind in morning South-Westerly or Westerly over the northern half of our area generally, but drawing into South in Finland and into East in the north of Norway. Fresh or strong in force over the United Kingdom, and strong to a gale in the south of Norway. Variable or Easterly airs prevailing in the southern countries. No great change as a whole later, but a separate cyclonic movement setting in over the north of Russia.

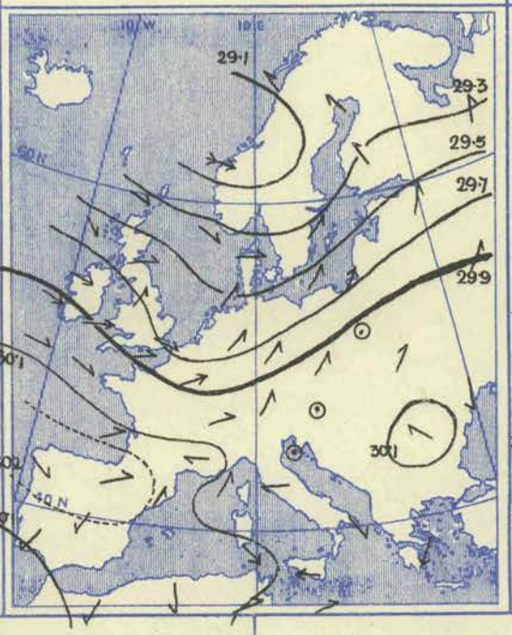
Barometer at 8 a.m. ranging from above 30·2 ins. in an elongated anticyclone extending from the Atlantic to Transylvania, to 30·0 ins. and less over Greece, to 29·6 ins. at Archangel, and to below 29·2 ins. in a large depression off the west of Norway. Disturbance near Archangel apparently moving westwards during day, and that off the west of Norway travelling eastwards. A fresh fall of the mercury commencing in Ireland and the south-west of England. Anticyclone decreasing somewhat in height.

Saturday, 29th August, 1903.

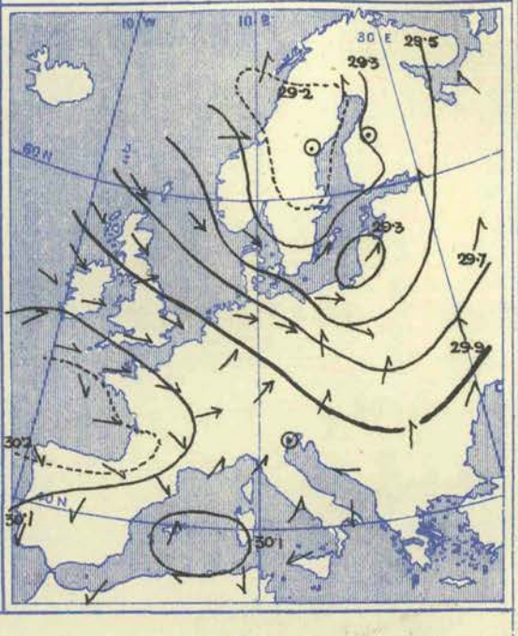
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull in most northern regions, but fair or fine in the southern countries and also in many parts of the United Kingdom. Rainy over the Netherlands, Denmark, and at several Scandinavian stations, and foggy at Lorient and Corunna. Rain falling later over our northern and western districts and in the most northern countries generally—0·9 in. at Christiansund, 1·7 ins. at Moscow, and 1·8 ins. at Memel.

Temperature fallen in Scotland and Scandinavia, risen in most other districts. Readings at 8 a.m. ranging from 83° at Barcelona, 80° at Patras, 78° on the coast of Portugal, and 75° at Malta and Algiers, to below 60° at nearly all stations in the northern half of our area, to 50° at Archangel, and to 48° at Sumburgh Head. Low also (52°) at Hermanstadt. Rising during day to 71° at Dungeness, to 80° or above in all the southern regions, and to above 90° in places; highest values, 95° at Perpignan, and 105° at Madrid and Algiers.

Wind in morning moderate to strong from between North-West and West or South-West over nearly all the northern countries, but South-Easterly or Southerly in the north of Scandinavia. A strong Westerly gale prevailing at Christiansund. Light variable airs prevalent over the Mediterranean and southern Europe. Little change as a whole later. Gale at Christiansund subsiding, and a slight backing taking place at Valencia Island.

Barometer at 8 a.m. highest, 30·2 ins. and upwards over the north of Spain and the adjacent portion of the Bay, and above 30·0 ins. in a large area extending thence across central Europe to the south of Russia and the Black Sea. Lowest, about 29·0 ins. in a depression having its centre over the north-west of Norway. Norwegian disturbance moving eastwards during day and becoming complex. Barometer rising decidedly over Great Britain, falling over central and south-eastern Europe. Rise ceasing in the south-west of Ireland.

IV.—GENERAL NOTES, etc.

The weather during this week was again of a very unsettled type over all the northern countries, with a good deal of rain and occasional brief intervals of clear sky. Thunderstorms were experienced at a few places during the earlier half of the period. Temperature did not, as a rule, differ much from the normal, but was mostly below it. Over the southern regions the conditions were almost continuously fine or fair, and temperature rather high. The latter region was mainly dominated by an anticyclone of no great intensity, while the northern parts of our area were visited by numerous depressions—some of them deep—which were either developed within that area, or (and more commonly) arrived from the westward or south-westward. The chief of the latter systems was one which, after moving rather erratically, travelled in an east-north-easterly or north-easterly direction from our south-west coasts to the Baltic. Other and deeper systems moved on to Scandinavia later in the week, but their centres kept outside our north-western and northern coasts. The general current of the wind over all the northern portions of our area was consequently Westerly, but Southerly breezes were sometimes experienced in front of the depressions, and North-Westerly or Northerly winds in their rear, while there was sometimes a complete cyclonic circulation. Gales were again felt in various parts of the northern countries, including our own north-west coasts, and fresh or strong breezes were very common. Within the region of high pressure the wind was usually very light and rather variable in direction.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 200.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	25·3	- 0·7	25	- 1
STRATHPEFFER SPA	32·3	+ 5·3	32	+ 5
EDINBURGH	45·2	+14·9	46	+ 15
COCKLE PARK	38·1	—	38	—
NEWCASTLE-ON-TYNE	29·5	—	30	—
YORK	20·3	-11·4	32	- 12
CROMER	26·8	—	28	—
LOWESTOFT	40·0	—	41	—
DUNMOW	25·3	—	26	—
SHEFFIELD	21·4	—	22	—
WORKSOP	15·7	-15·7	16	- 16
THURCASTON	19·7	-14·9	20	- 15
TUNBRIDGE WELLS	35·2	—	37	—
MARGATE	32·0	- 8·1	33	- 8
BROADSTAIRS	38·7	—	40	—
RAMSGATE	—	—	—	—
EASTBOURNE	39·7	- 4·6	41	- 5
BRIGHTON	42·6	- 3·1	44	- 3
WORTHING	47·1	—	49	—
BOGNOR	47·4†	—	49†	—
WATERGATE PARK	34·2	—	36	—
WESTBOURNE	43·9†	- 0·5	46†	- 1
VENTNOR HOSPITAL	34·7	-10·3	36	- 11
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	17·5	-20·4	18	- 21
SOUTHPORT	31·5	—	32	—
RHYL	33·8	—	35	—
ABERDOVEY	28·7†	—	30†	—
TENBY	27·2	-14·2	28	- 15
TORQUAY	33·0	-11·5	34	- 12
NEWQUAY	28·9	-15·4	30	- 16
GUERNSEY	46·3†	- 5·5	48†	- 6

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA :—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX - No. 30 - p. 176	Newton Rigg	—	44	—	49·7	56·1	- 1·0	99	—	—	—	—	—	—	—	—
" - No. 31 - p. 182	Glasgow	—	—	—	—	—	—	—	—	—	—	—	35·0	+ 5·0	32	+ 5
" - No. 32 - p. 188	"	—	46	—	50·8	55·7	- 1·1	96	—	—	—	—	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 35.] *Third Series.* WEEK ENDING SATURDAY, SEPTEMBER 5TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 206.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	66	39	58·6	45·5	51·8	1 below	69	− 5	0	− 1	1412	−128	491	− 49
	1. SCOTLAND, EAST	70	35	60·6	46·3	53·1	1 below	78	− 6	0	0	1642	−205	502	− 81
	2. ENGLAND, N.E.	74	42	65·3	50·2	57·4	1 above	108	+12	0	0	1939	− 48	342	−137
	3. ENGLAND, EAST	85	46	71·2	53·7	62·0	4 above	140	+32	0	0	2309*	0	322	−203
	4. MIDLAND COUNTIES	75	40	66·7	50·2	58·1	1 above	113	+10	0	0	2146	−159	355	−180
	5. ENGLAND, SOUTH	84	48	69·1	55·4	61·9	3 above	139	+20	0	0	2424	− 84	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	67	43	61·5	48·5	54·7	0 (average)	89	0	0		1860*	− 89	317	− 96
	7. ENGLAND, N.W.	71	38	63·9	51·0	57·2	0 (average)	106	+ 5	0	0	2069	− 56	259	−129
	8. ENGLAND, S.W.	73	45	64·7	54·5	59·4	1 above	122	+14	0	0	2337	− 5	162	−138
	9. IRELAND, NORTH	67	43	61·5	49·7	55·3	0 (average)	93	0	0	0	1906	−158	286	− 61
	10. IRELAND, SOUTH	71	45	63·5	52·2	57·6	1 above	109	+ 7	0	0	2294	− 42	183	− 67
	— CHANNEL ISLANDS	72	53	66·9	57·3	61·9	2 above	139	+12	0	0	2695	+ 44	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 206.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	23	13 more	174	+28	46·2	+16·6	15	− 9	16	− 9	806	− 95	24	− 3
	1. SCOTLAND, EAST	6	20	13 more	152	+25	27·2	+ 7·5	28	− 2	30	− 2	929	−103	28	− 3
	2. ENGLAND, N.E.	5	9	3 more	125	+ 9	18·6	+ 2·8	32	− 1	34	− 1	1002	− 82	30	− 3
	3. ENGLAND, EAST	2	3	2 less	109	− 8	19·9	+ 4·8	46	+ 6	49	+ 6	1160*	− 85	36	− 3
	4. MIDLAND COUNTIES	5	7	1 more	122	+ 9	22·6	+ 5·0	29	− 5	31	− 5	994	− 84	30	− 3
	5. ENGLAND, SOUTH	4	8	2 more	125	+16	23·0	+ 6·0	44	+ 4	48	+ 4	1231	− 22	38	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	6	28	17 more	159	+27	42·9	+12·6	30	0	32	0	1030	− 46	31	− 1
	7. ENGLAND, N.W.	6	14	6 more	146	+23	26·6	+ 5·7	29	− 1	31	− 1	1104*	+ 34	34	+ 1
	8. ENGLAND, S.W.	5	14	6 more	140	+16	30·1	+ 6·8	26	−13	28	−14	1185	−108	36	− 3
	9. IRELAND, NORTH	6	15	7 more	177	+27	30·8	+ 8·2	34	+ 6	35	+ 7	899	− 90	27	− 3
	10. IRELAND, SOUTH	4	9	1 more	158	+23	32·5	+ 7·1	29	− 4	30	− 4	1004	−116	31	− 4
	— CHANNEL ISLANDS	5	10	4 more	149	+23	23·1	+ 4·3	28	−19	30	−20	1400	− 89	43	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was again very rainy over the greater part of the Kingdom, but in the south and south-east the conditions were much warmer than of late, and on most days much finer. Thunderstorms were experienced over central Ireland and in various parts of Great Britain on Wednesday and over the south-east of England on Friday evening.

Temperature exceeded the mean in nearly all the English districts and in Ireland S., but only just equalled it in Scotland W., England N.W., and Ireland N., and was again below it in Scotland N. and E. In England S. and E. the excess was as much as 3° or 4° respectively. The highest of the maxima were recorded, as a rule, either on the 1st or 2nd September, when they were as high as 85° in England, E., 84° in England S., 75° in the Midland Counties, and 74° in England N.E. In the other districts they varied between 73° in England S.W. and 66° in Scotland N. The lowest of the minima, which were registered on rather irregular dates, ranged from 35° in Scotland E., 38° in England N.W., and 39° in Scotland N. to 48° in England S. and 53° in the Channel Islands.

Rainfall was greatly in excess of the mean in Scotland, the western districts of England, and in the north of Ireland, but very little so over southern and central England and the south of Ireland, and less than the normal in England E. During the thunderstorm on Friday, however, 1·19 ins. fell in London, 1·65 ins. at Ventnor, and as much as 2·20 ins. at Westbourne.

Bright Sunshine was deficient over the Kingdom as a whole, but in excess of the mean in the south and east of England and the north of Ireland. The percentage of the possible duration was as high as 49 or 48 in England E. and S., whence it decreased to 30 in the Channel Islands, Ireland S., and Scotland E., to 28 in England S.W., and to 16 in Scotland N.

Barometer and Wind. The distribution of pressure during this week was mainly cyclonic, but our most southern and south-eastern districts were at times under the influence of an anti-cyclone extending hence from the Continent. Some large and rather deep depressions moved north-eastwards either outside or immediately across our Islands, and the winds were thus chiefly between S. and W. and of considerable strength in the west and north-west. During the middle of the week a depression, which travelled quickly north-north-eastwards from the Bay of Biscay to the west of Norway and at the same time increased in depth, caused the wind on our southern coasts to draw into South-East or East for a time. The severe thunderstorms of Friday were provoked by a shallow secondary disturbance that moved slowly north-eastwards from the Bay of Biscay.

307 | 70 Wy.& S. Ltd.
219 | 90 12 | 02

II.—DATA from which the SUMMARY on page 205 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	56	39	54·6	44·0	49·1	− 2·3	50	0	6	1·30	+ 0·53	*	*	*	*
	Stornoway	60	42	57·3	46·7	51·8	− 0·6	69	0	6	2·56	+ 1·66	17·7	− 9·5	18	− 10
	Wick	64	40	59·6	44·7	51·8	− 1·1	69	0	7	1·99	+ 1·39	*	*	*	*
	Lairg Ⓢ	66	40	60·5	43·7	51·7	− 1·1	68	0	6	1·94	+ 1·26	*	*	*	*
	Glencarron Ⓢ	65	40	58·6	43·8	50·8	− 1·7	62	0	7	2·77	+ 1·11	*	*	*	*
	Fort Augustus Ⓢ	65	43	60·1	46·6	53·0	− 1·5	77	0	7	1·74	+ 0·90	4·4	− 14·7	5	− 15
	Fort William	64	46	59·8	48·9	54·1	− 0·7	85	0	7	3·94	+ 2·40	12·3	− 10·3	13	− 11
1. SCOTLAND E.	Nairn	65	41	60·6	44·9	52·4	− 1·9	73	0	7	1·34	+ 0·74	*	*	*	*
	Aberdeen	65	39	60·0	46·4	52·9	− 1·0	76	0	7	2·42	+ 1·76	28·7	− 2·8	30	− 3
	Braemar Ⓢ	61	35	56·3	43·0	49·3	− 1·8	51	0	7	1·70	+ 0·92	*	*	*	*
	Ochtertyre Ⓢ	64	43	61·0	47·3	53·8	− 0·9	83	0	7	3·32	+ 2·49	*	*	*	*
	Leith	70	45	65·3	49·6	57·1	+ 0·9	106	0	4	1·40	+ 0·86	*	*	*	*
	Marchmont Ⓢ	65	41	60·4	46·7	53·2	− 0·7	78	0	6	1·96	+ 1·20	26·8	− 3·4	28	− 4
2. ENGLAND, N.E.	Alnwick Castle	68	44	63·8	48·5	55·8	+ 1·2	97	0	6	1·65	+ 1·00	*	*	*	*
	Durham	66	43	62·1	47·9	54·7	− 0·9	89	0	6	1·29	+ 0·75	28·3	− 1·7	30	− 2
	Shields	69	47	64·4	50·3	57·0	+ 1·7	105	0	7	1·23	+ 0·68	*	*	*	*
	Scarborough Ⓜ	72	42	66·4	48·1	56·8	+ 0·3	104	0	7	0·52	− 0·07	32·1	—	34	—
	Spurn Head	74	51	66·6	53·9	60·0	+ 2·4	126	0	2	0·20	− 0·21	*	*	*	*
	Fulbeck (Lincolnshire)	72	48	68·2	52·3	59·9	+ 2·8	125	0	4	0·39	− 0·13	35·2	—	37	—
3. ENGLAND, E.	Hillington Ⓜ	84	46	71·7	51·3	61·0	+ 3·4	133	0	2	0·30	− 0·31	40·9	+ 5·6	44	+ 6
	Yarmouth	72	47	68·7	53·9	60·9	+ 2·7	132	0	1	0·29	− 0·27	*	*	*	*
	Geldeston	82	46	72·4	52·2	61·8	+ 3·8	139	0	2	0·33	− 0·17	47·3	+ 7·9	50	+ 8
	Cambridge	85	47	73·8	52·3	62·5	+ 3·9	144	0	1	0·30	− 0·20	43·7	+ 6·0	47	+ 6
	Felixstowe	75	51	69·4	57·1	63·0	+ 5·3	147	0	2	0·34	—	56·5†	—	61†	—
	Rothamsted	80	47	70·1	52·4	60·8	+ 3·5	132	0	4	0·47	− 0·09	42·3	+ 4·8	45	+ 5
	Shoeburyness	81	52	72·1	56·6	64·0	+ 4·3	154	0	2	0·34	− 0·10	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	70	43	63·9	49·7	56·5	+ 0·8	102	0	6	1·07	+ 0·42	30·5	—	32	—
	Bawtry (Hesley Hall)	72	41	67·6	49·7	58·2	+ 1·2	113	0	5	0·53	− 0·17	*	*	*	*
	Nottingham	72	40	66·6	49·6	57·7	+ 0·3	110	0	6	0·27	− 0·30	23·5	—	25	—
	Loughborough	74	48	68·0	51·2	59·2	+ 1·2	120	0	6	0·26	− 0·30	*	*	*	*
	Colly Weston (Stamford)	75	46	70·0	49·3	59·2	+ 1·2	120	0	4	0·37	− 0·18	*	*	*	*
	Cheadle Ⓜ	70	44	63·7	47·8	55·4	+ 0·1	94	0	6	1·19	+ 0·45	*	*	*	*
	Birmingham (Edgbaston)	71	47	65·6	51·5	58·2	+ 1·2	113	0	6	0·65	+ 0·03	27·3	—	29	—
	Churchstoke Ⓜ	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	71	45	67·0	50·3	58·3	+ 0·7	114	0	4	1·07	+ 0·51	*	*	*	*
	Cirencester	69	44	65·7	49·9	57·4	+ 0·9	108	0	5	0·91	+ 0·23	23·8	− 11·8	26	− 13
	Oxford	73	49	68·6	53·3	60·6	+ 2·4	130	0	4	0·36	− 0·19	36·2	− 1·0	39	− 1
5. ENGLAND, S.	London	84	51	74·4	54·9	64·2	+ 4·6	155	0	4	1·27	+ 0·76	44·5‡	+ 11·0‡	48‡	+ 12‡
	Swarraton (Alresford) Ⓜ	79	48	69·4	53·4	61·0	+ 4·1	133	0	4	0·78	+ 0·13	*	*	*	*
	Dungeness	77	50	69·4	57·4	63·1	+ 3·6	148	0	2	0·22	− 0·28	51·0	—	55	—
	Hastings (St. Leonards)	75	52	68·5	56·2	62·1	+ 2·6	141	0	2	0·81	+ 0·22	55·6	+ 12·8	60	+ 14
	Southampton	82	52	71·9	55·2	63·2	+ 3·5	148	0	3	0·74	+ 0·11	43·1	+ 1·8	46	+ 2
	Portland Bill	67	55	64·7	57·4	60·9	+ 1·5	132	0	6	0·96	—	*	*	*	*
	Shaftesbury Ⓜ	74	49	65·4	53·3	59·1	+ 1·8	120	0	6	0·75	+ 0·03	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	62	43	60·3	45·8	52·7	− 2·2	75	0	7	4·68	+ 3·20	*	*	*	*
	Glasgow	63	46	61·1	48·8	54·7	+ 0·3	89	0	6	2·81	+ 1·93	27·4	+ 1·7	29	+ 2
	Cally Ⓢ	67	43	64·1	48·5	55·9	+ 1·5	97	0	5	2·25	+ 1·21	*	*	*	*
	Aspatria	67	45	61·8	49·3	55·3	− 0·1	93	0	5	2·39	—	27·8	—	29	—
	Douglas (Isle of Man)	64	45	60·4	50·3	55·1	0·0	92	0	5	1·82	+ 0·98	34·4	− 1·2	36	− 1
7. ENGLAND, N.W.	Newton Rigg	65	38	61·8	45·3	53·2	− 1·4	78	0	7	2·31	—	25·0	—	26	—
	Stonyhurst	66	46	62·3	49·7	55·8	0·0	97	0	6	1·28	+ 0·13	29·7	− 1·3	32	− 1
	Blackpool Ⓜ	67	45	64·1	51·3	57·4	+ 0·6	108	0	7	1·71	+ 0·91	34·3	+ 3·0	37	+ 3
	Manchester (Prestwich)	71	42	64·5	49·7	56·7	+ 0·5	103	0	5	1·12	+ 0·26	25·5	—	27	—
	Liverpool Obsy. (Bidston)	68	48	64·0	52·1	57·8	+ 0·2	111	0	7	1·54	+ 0·84	29·4	—	31	—
	Chester (Hawarden Bridge)	71	46	67·2	53·4	60·0	+ 1·9	126	0	4	0·98	—	*	*	*	*
	Llandudno Ⓜ	68	51	65·5	53·0	59·0	+ 0·8	119	0	6	1·09	+ 0·43	28·2	− 4·2	30	− 5
	Holyhead	67	52	61·7	53·3	57·3	− 0·3	107	0	6	1·44	+ 0·74	*	*	*	*
8. ENGLAND, S.W.	Llandovery	70	47	66·3	55·7	60·8	+ 4·1	132	0	4	1·96	+ 0·92	*	*	*	*
	Pembroke	63	53	61·1	55·0	57·9	+ 0·1	111	0	4	1·32	+ 0·61	24·0	− 14·5	26	− 16
	Clifton	67	52	65·2	55·8	60·3	+ 2·1	128	0	6	1·18	+ 0·41	*	*	*	*
	Bath	71	48	66·9	53·7	60·0	+ 1·3	126	0	6	0·79	+ 0·13	27·1	—	29	—
	Arlington (N. Devon)	66	48	63·3	52·0	57·4	+ 0·8	108	0	4	2·07	+ 0·93	*	*	*	*
	Cullompton Ⓜ	73	45	68·0	53·5	60·4	+ 1·9	129	0	4	1·02	+ 0·32	25·4	− 11·4	27	− 12
	Falmouth	68	52	63·5	54·7	58·9	+ 0·6	118	0	6	1·13	+ 0·25	26·6	− 15·1	29	− 16
	Plymouth	66	53	63·3	55·6	59·3	+ 0·2	121	0	4	1·64	+ 0·90	28·3	− 11·4	30	− 12
9. IRELAND, N.	Malin Head	61	48	59·4	50·3	54·6	− 1·3	88	0	6	1·40	+ 0·66	*	*	*	*
	Edenfel (Omagh)	64	43	61·3	47·6	54·1	− 0·2	85	0	6	1·86	+ 1·02	*	*	*	*
	Blacksod Point	62	48	60·3	51·1	55·5	− 1·0	95	0	6	2·33	+ 1·29	*	*	*	*
	Markree Castle	64	47	62·5	49·8	55·9	+ 1·0	97	0	6	1·38	+ 0·47	30·6	+ 3·7	32	+ 4
	Armagh	67	44	63·2	48·6	55·6	+ 0·6	95	0	5	0·60	− 0·09	36·3	+ 8·6	38	+ 9
	Donaghadee	66	45	62·1	50·7	56·1	+ 0·4	99	0	6	1·32	+ 0·64	*	*	*	*
10. IRELAND, S.	Dublin	71	51	64·7	52·9	58·5	+ 1·1	116	0	3	0·40	− 0·18	31·5	− 3·3	34	− 4
	Birr Castle	70	50	64·3	51·0	57·3	+ 1·4	107	0	4	1·14	+ 0·39	27·8	− 2·9	30	− 3
	Kilkenny	70	50	65·1	52·3	58·4	+ 1·7	115	0	2	0·61	− 0·07	*	*	*	*
	Waterford	68	45	62·9	51·7	57·0	+ 0·2	105	0	3	0·81	− 0·01	*	*	*	*
	Roche's Point	65	51	61·3	53·3	57·1	− 0·5	106	0	5	0·82	− 0·02	*	*	*	*
	Valencia	63	52	61·9	53·3	57·4	− 0·2	108	0	6	1·87	+ 0·83	26·3	− 6·2	28	− 7
	Killarney	68	49	65·0	52·3	58·4	+ 1·4	115	0	5	0·90	− 0·06	*	*	*	*
	Foynes	68	47	63·1	51·0	56·8	+ 0·2	104	0	4	0·80	0·00	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	66	55	64·3	56·6	60·3	+ 0·8	128	0	6	1·50	+ 0·85	31·1	− 13·5	33	− 15
	Jersey	72	53	69·4	57·9	63·4	+ 2·1	150	0	4	0·58	− 0·07	29·2	− 18·8	32	− 21

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

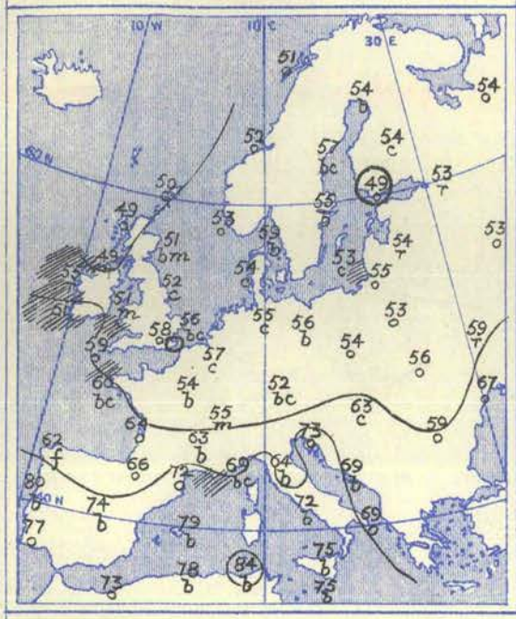
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

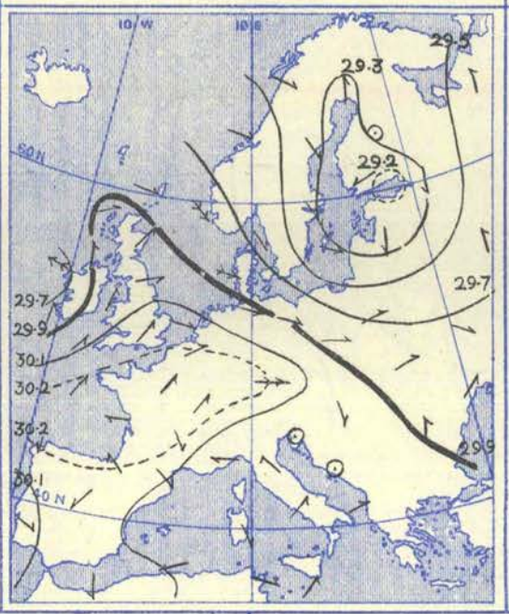
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 30th August, 1903.

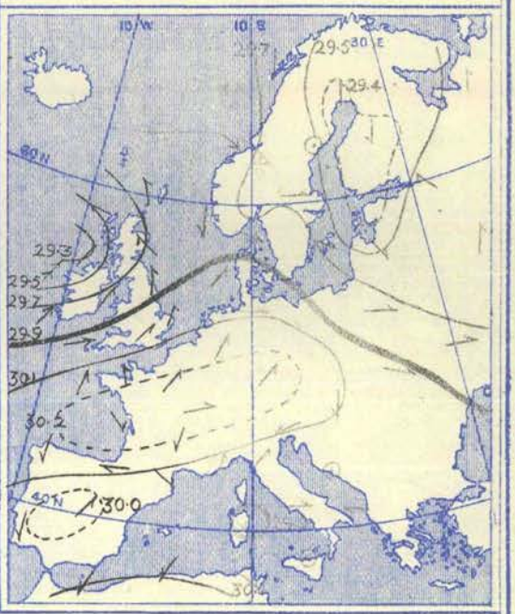
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull in nearly all regions except France, Italy, and the Iberian Peninsula. Very rainy in Ireland and Wales, at St. Petersburg, Riga, and Swinemünde, as well as at some Austrian stations. Rain extending to almost all parts of our Islands later and becoming heavy in places—as much as 0·8 in. at Wick and 1·3 ins. at Stornoway. Considerable falls experienced in Russia and Denmark.

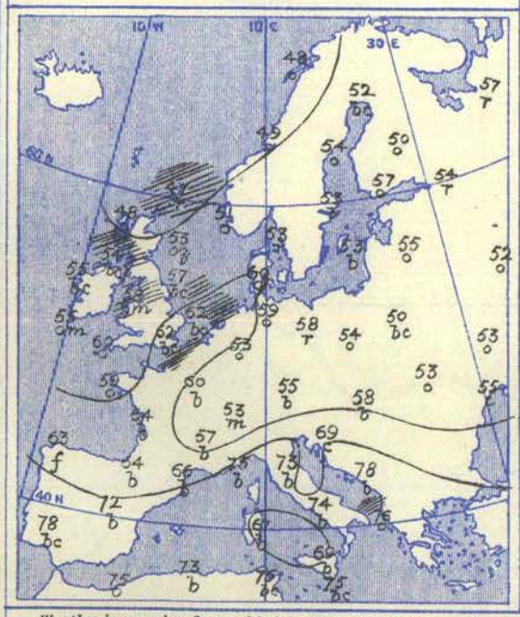
Temperature changed irregularly. Readings at 8 a.m. highest, 84° at La Calle, 80° at Oporto, 79° at Barcelona, and 73° at Trieste. Lowest, 49° at Stornoway and Hangö, 51° at Bodö, 52° at Le Mans, 53° at Moscow and Parsonstown, and 54° at Paris and Munich. Maxima during day, 66° in London, 70° at Parsonstown, above 70° in Germany, above 80° in Italy, 91° at Perpignan, 99° at Aumale, and 106° at Madrid. Thermometer remaining below 60° at some Scotch stations; rising to 66° at Hernösand.

Wind at 8 a.m. light and anticyclonic over France and its neighbourhood; Southerly to South-Easterly, moderate to strong, at our own western stations, and showing an irregular cyclonic circulation over northern Europe. North-Westerly wind in the south-west of Norway blowing a gale. Wind increasing to a strong gale from the South-Westward in the west of Ireland by evening and to a moderate gale in the Irish Sea and St. George's Channel.

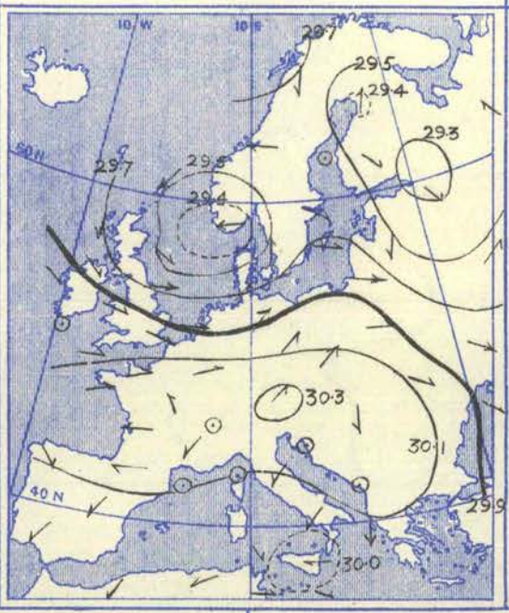
Barometer in morning highest, about 30·2 ins., in an anticyclone stretching from the Bay of Biscay to Bavaria. Lowest, 29·2 ins. and less, in a complex depression over Finland and the Baltic Provinces. Less than 29·7 ins. in a depression off the west of Ireland. Latter moving east-north-eastwards later and barometer falling very quickly in the north of Ireland and the west of Scotland. Gradients increasing in all our northern districts and becoming steep.

Monday, 31st August, 1903.

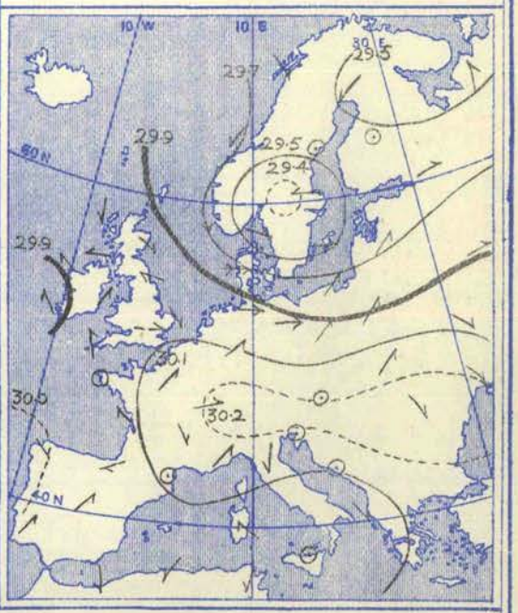
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in nearly all parts of France, the Spanish Peninsula, Italy, and at our own south-eastern stations; cloudy or dull elsewhere, with rain at Archangel, St. Petersburg, Berlin, over the Skager Rack, and the extreme north of Scotland, and showers at Malin Head. Fog prevailing at Corunna and Cape Gris Nez. Rain falling (mostly in small amounts) in several parts of Russia, Scandinavia, Finland, and in our own western and northern districts later. As much as 1·04 ins. at Blacksod Point.

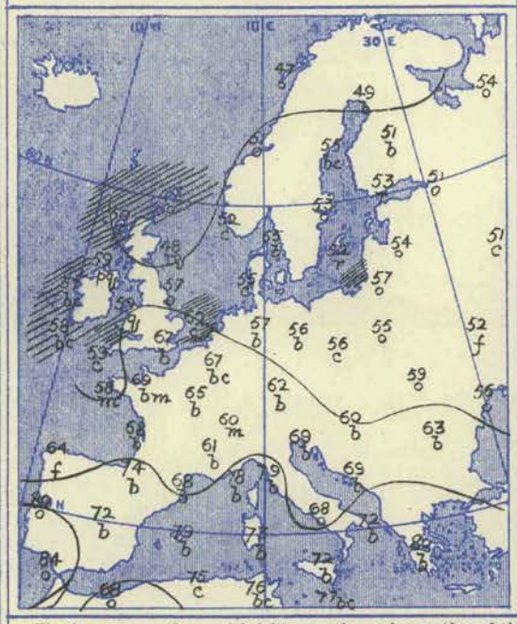
Temperature risen over Germany, the Netherlands, the north-east of France, England, and the south of Scotland; fallen or changed little elsewhere. Morning readings highest, 78° at Lisbon and Barcelona, 76° at Brindisi, 75° at Algiers, Malta, and the south-east of France, and 69° at Trieste. Lowest, (1) 47° in the north of Scotland, (2) 47° at Bodö, (3) 51° at Kharkov, (4) 53° at Belfort, (5) 53° at Parsonstown. Maxima during day, 72° in London, about 80° over central Europe, 90° or above in Greece, Italy, and the south-west of France, and 102° at San Fernando. Maxima below 60° in most parts of Scotland and in the extreme north of Ireland.

Wind at 8 a.m. showing a complete cyclonic circulation of considerable strength (a gale in places) around the North Sea, another cyclonic movement of light winds over Finland and northern Russia, and a third around Sicily. Anticyclonic airs prevailing throughout central Europe. The two northern circulations becoming transferred further to the eastward or north-eastward by evening, and that in the south disappearing. Wind backing to South-East in the west of Ireland.

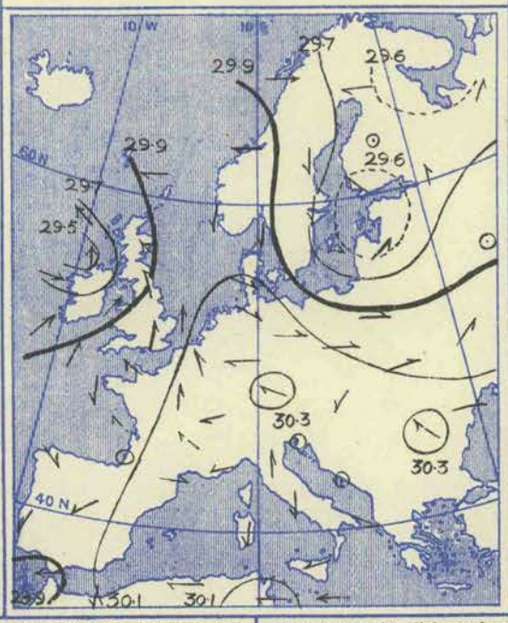
Barometer in morning ranging from 30·2 ins. to 30·3 ins. in the central portion of an anticyclone stretching from Limoges eastwards to Buda-Pesth, to below 30·0 ins. in a shallow depression over Sicily, and to 29·3 ins. or less in two other systems—one over the North Sea and the other over the north of Russia. Anticyclone moving eastwards during day; Russian depression travelling northwards, and that over the North Sea east-north-eastwards. Mediterranean disturbance disappearing. Pressure decreasing briskly in Ireland.

Tuesday, 1st September, 1903.

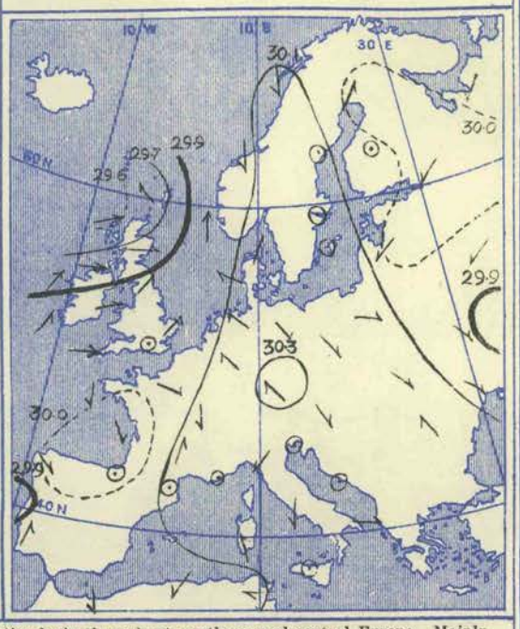
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over the major portion of the southern half of Europe, the south of England, and the north of Sweden; cloudy or dull in most other regions, as well as in Portugal, and foggy at Corunna. Rainy over the Gulf of Finland and in Scotland, showery in the north of Ireland, and thundery in Brittany. Very little or no rain as a whole later, but more than 0·5 in. in some parts of Scotland, and 1·1 ins. at Scilly; as much as 1·1 ins. falling at Sfax.

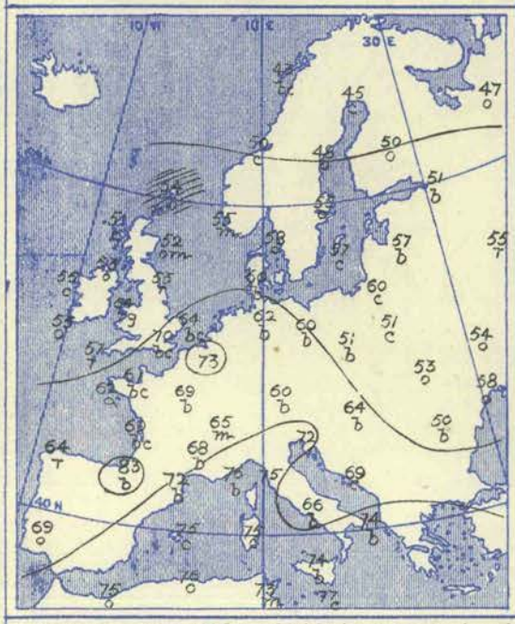
Temperature risen in almost all places, but fallen in some parts of Scotland and Italy. Readings at 8 a.m. highest, 84° at San Fernando, 80° at Patras, several degrees above 70° in the south generally, and 67° in London. Lowest, (1) 47° at Bodö and 49° at Haparanda, (2) 48° at Nairn and Aberdeen, (3) 51° at Moscow and St. Petersburg. Rising during day to above 70° over southern and central England, 83° in London, 84° at Brussels and Frankfürt, 89° at Paris, 93° at Florence, and 95° at Rochefort. Thermometer not rising above 60° at some Irish stations, and remaining below it at some in Scotland.

Wind in morning light and anticyclonic throughout southern and central Europe. Mainly cyclonic elsewhere. A complete circulation shown over the Gulf of Riga and its vicinity, the Westerly current in north Germany blowing a gale; a partial circulation of fresh winds or gales prevailing over Ireland and Scotland, and another of very light airs around Brittany. The two latter becoming transferred further to the north-eastward later in day, and that in the Gulf of Riga entirely dying out, but a new one setting in over the south of Russia.

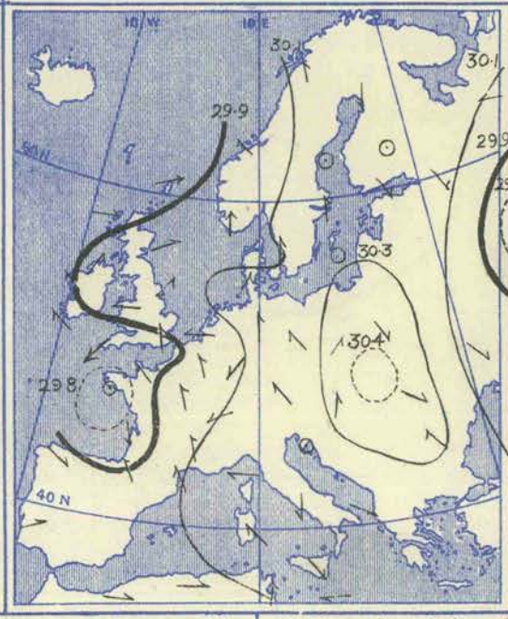
Barometer at 8 a.m. highest, 30·2 ins. to 30·3 ins. in a large anticyclone covering the whole of central and south-eastern Europe, and above 30·0 ins. in a ridge extending northwards to the north-west of Norway. Lowest, 29·5 ins. and less (1) in a depression off our north-west coasts, and (2) in another near Riga; below 30·0 ins. in a small system over Brittany. Russian minimum disappearing by evening and the two others moving north-eastwards. A new disturbance appearing near Kharkov, and a large shallow system over the Bay of Biscay.

Wednesday, 2nd September, 1903.

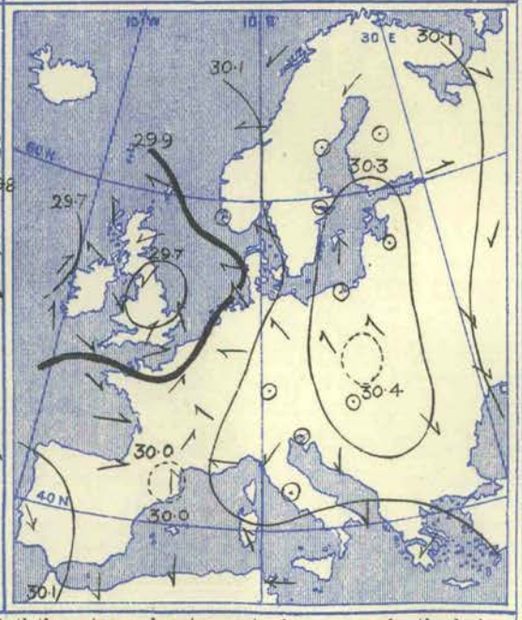
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine and bright in most parts of southern and central Europe and the south-east of England, and cloudy or overcast in almost all other regions. Rainy at Corunna and Oporto, and in many parts of England and Ireland, and thundery in Brittany. Nearly an inch of rain falling later in Scotland and the north-east of England, and more than an inch in Lancashire—as much as 1·40 ins. at Southport. Considerable falls experienced at Tunis and Sfax. Thunderstorms occurring at many English and French stations.

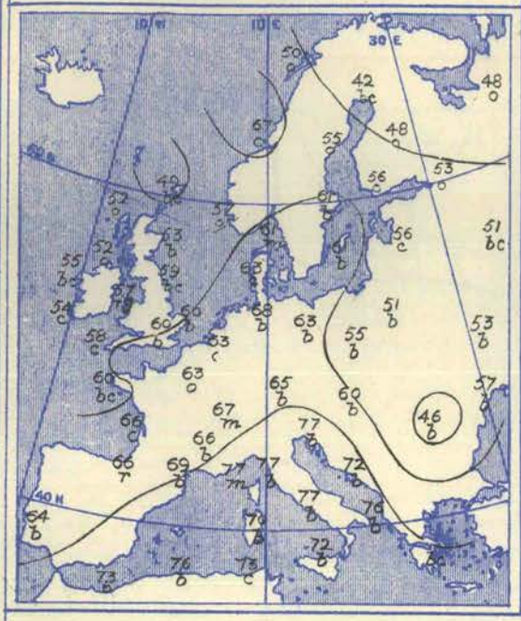
Temperature fallen in most places, but risen in Denmark, north Germany, France, the Netherlands, the south-east of England and over Scotland. Readings at 8 a.m. highest, above 80° in the south-west of France and the north-east of Spain, above 70° in nearly all Mediterranean regions, and as high as 70° in London. Lowest, (1) 43° at Bodö and Haparanda, (2) 50° at Hermanstadt, (3) 52° at Nairn and Parsonstown. Rising subsequently to 84° in London, and to an equal or higher value over central Europe, the Netherlands, France, and the most southern countries. Highest maximum, 96° at Clermont.

Wind in morning cyclonic over both the eastern and western parts of our area, and anticyclonic in the intervening regions. Light to moderate in force generally, but North-Easterly wind fresh at Scilly. Wind shifting from the North-Eastward to the Westward over the south of our Islands by evening and becoming Easterly in Scotland. Little other change.

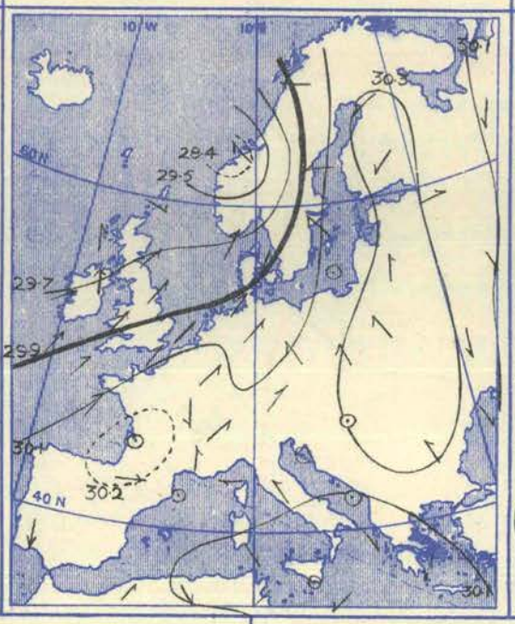
Barometer risen briskly over northern Europe and the Baltic, fallen in the south and south-west. Readings at 8 a.m. ranging from 30·2 ins. to 30·4 ins. in a large anticyclone stretching from Turkey to Hernösand, to 29·8 ins. and less (1) in a depression over central Russia, and (2) in another over the Bay of Biscay and Brittany. Latter system travelling quickly north-eastwards and growing deeper later, and both the anticyclone and the Russian disturbance moving eastwards.

Thursday, 3rd September, 1903.

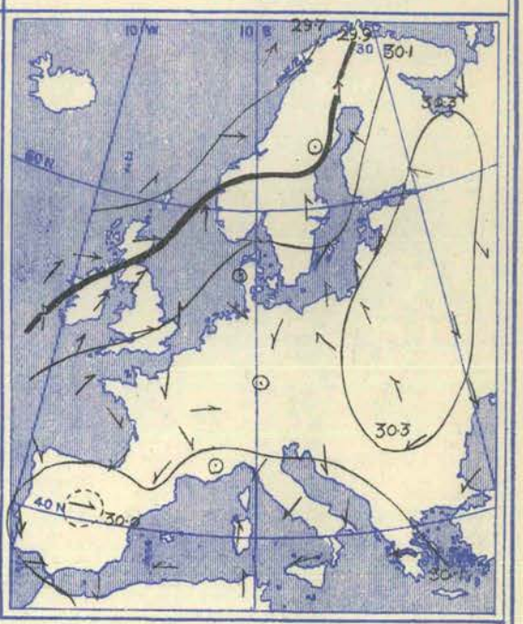
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in most parts of the Continent and also at several stations in our Islands. Cloudy or dull in Norway and on our north-west coasts, and rainy or showery at Holyhead and Malin Head. Rain falling later in the north and west of the United Kingdom, at Haparanda, and at some Finnish stations, and a thunderstorm occurring in the south-west of France.

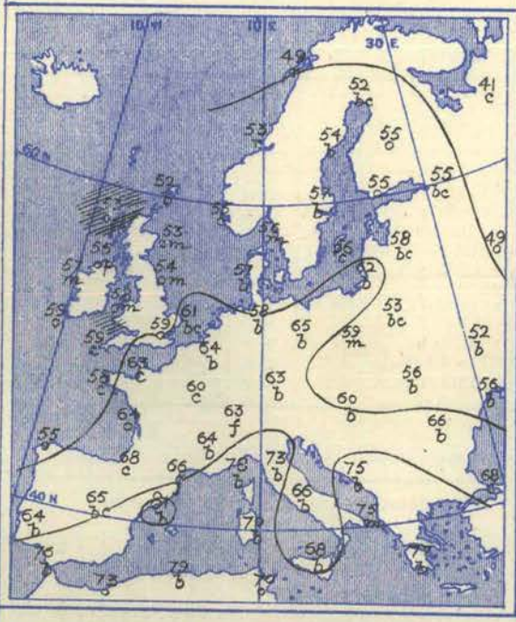
Temperature risen generally, but fallen quickly over France and our south-eastern districts. Readings in morning highest, 77° at some Italian stations and Cape Sicié, and not much lower in the south as a whole. Lowest, (1) 42° at Haparanda, (2) 46° at Hermanstadt, (3) 51° at Moscow, (4) 49° at Sumburgh Head. Rising during day to 70° and 71° respectively at Yarmouth and in London, and to between 80° and 90° over Germany and the south of Europe. Highest readings, 93° at Nice and 94° at Florence.

Wind light and anticyclonic over the eastern half of our area and cyclonic in the west and north-west. South-Westerly breezes fresh over our south-western coasts and strong to a gale in the south-west of Norway. Easterly and South-Easterly gales prevailing in the north of Norway and a North-North-Easterly gale reported at Athens. Little change in direction later, but gales subsiding.

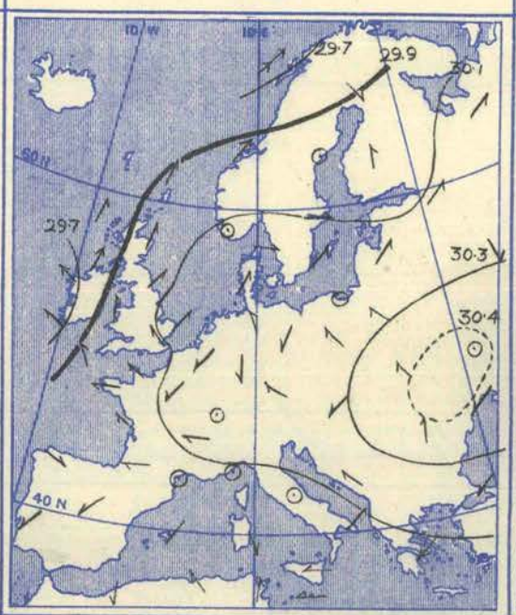
Barometer at 8 a.m. highest, 30·3 ins. and upwards in the centre of an elongated anticyclone stretching from Transylvania to the north of Finland. Lowest, below 29·4 ins. in a depression off the west of Norway. No higher than 29·8 ins. in another minimum over the south-east of Russia. High pressure system moving eastwards later, Norwegian disturbance travelling northward, and that over Russia disappearing.

Friday, 4th September, 1903.

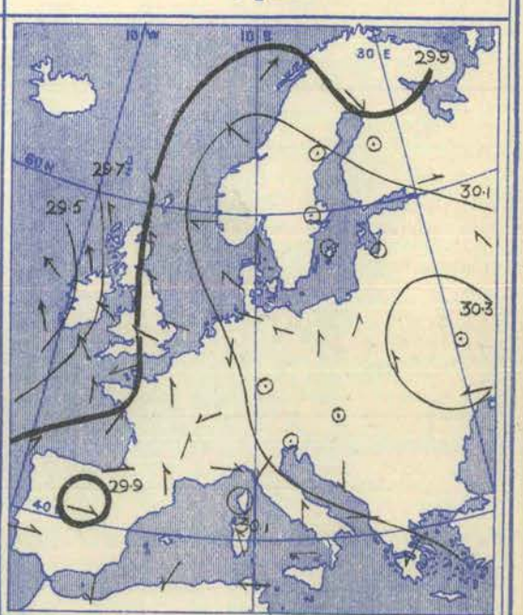
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine generally, but dull on our most western coasts and in Norway, with rain in several places. Rain later throughout our Islands and the northern parts of France, accompanied by severe thunderstorms in the latter district and in the more southern parts of England. As much as 1·19 ins. of rain in London and 1·30 ins. at Cape Gris Nez.

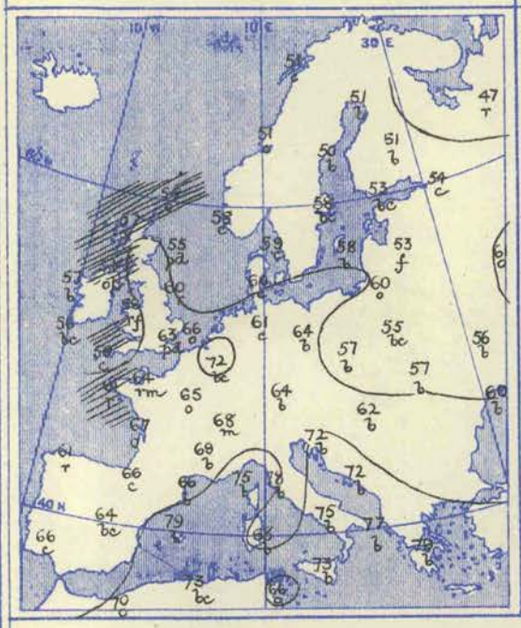
Temperature at 8 a.m. ranging from 81° at Barcelona, 79° at Algiers, and between 70° and 80° in the south generally, to below 60° in most parts of our Islands and in the northern regions, to 49° at Bodö and Moscow, and to 41° at Archangel. No higher than 51° at Nottingham. Rising subsequently to 75° in London, to about 80° in Germany and Austria, to between 80° and 90° over France and southern Europe. Highest reading, 93° at Madrid.

Wind in morning cyclonic over all the western and north-western countries, South-Easterly to Southerly over France and our Islands (strong on our south-west coasts), and South-Westerly (strong) in Norway. Light and anticyclonic over eastern and south-eastern Europe. Not much change as a whole during day, but strength increasing along our western coasts, and wind in France becoming South-Westerly or Southerly.

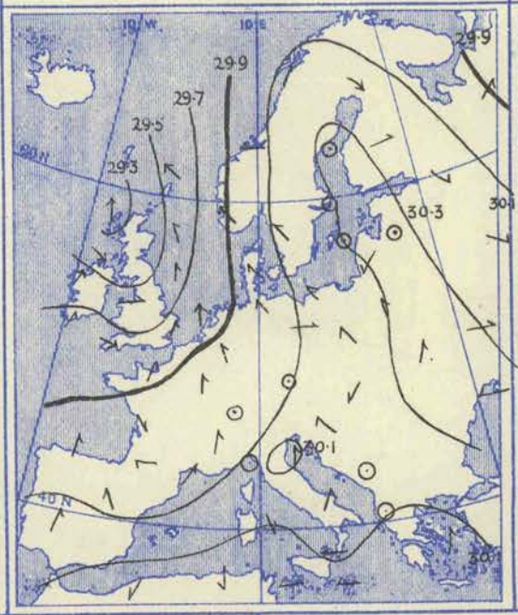
Barometer at 8 a.m. ranging from 30·3 ins. to 30·4 ins. in an anticyclone over the southern half of Russia, to below 30·0 ins. in a shallow depression over the Bay of Biscay, and to 29·7 ins. and less in two other systems lying respectively off the west of Ireland and the north-west of Norway. Norwegian depression disappearing to the north-eastward later, and that off Ireland extending more over our Islands. Shallow system over the Bay moving north-eastwards.

Saturday, 5th September, 1903.

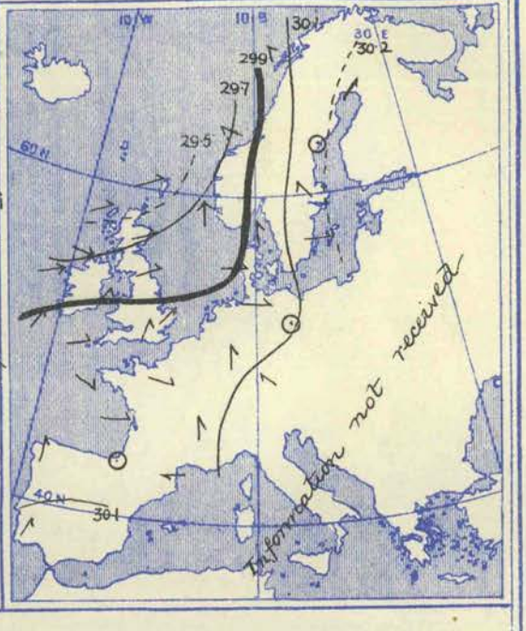
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. unsettled, with some rain over the United Kingdom and the neighbouring parts of the Continent, and also at Archangel; fine in nearly all other regions, but rainy in the extreme north-west of Spain. Slight rain falling later in most parts of the British Isles, and about half an inch at Bodö, Skagen, and Corunna. Thunderstorms experienced at the mouth of the Elbe and in the north of Denmark.

Temperature risen over Great Britain, the Netherlands, and France, changed irregularly elsewhere. Morning readings highest, 79° at Patras and Barcelona, and above 70° in the south generally, above 60° in most parts of Great Britain. Lowest, 47° at Archangel, 50° or 51° in the north of Scandinavia, and 54° at Sumburgh Head and Parsonstown. Maxima during day 70° in London, 71° at Yarmouth, 78° at Paris, 85° at Nice, and 87° at Belfort.

Wind cyclonic over the western regions, anticyclonic elsewhere. Westerly and South-Westerly winds fresh or strong over Ireland and England, and Southerly and South-Easterly wind fresh in some parts of Scotland. Decreasing considerably in force over our Islands later, and veering to the South-Westward in Scotland.

Barometer risen over Scandinavia and Finland, fallen generally elsewhere. Readings at 8 a.m. ranging from 30·2 ins. to 30·3 ins. and upwards in a large anticyclone stretching from Asia Minor to the north of Scandinavia, to 29·9 ins. at Archangel, and to below 29·3 ins. in a deep depression having its centre off the Hebrides. Latter system subsequently moving north-eastwards, and gradients over the United Kingdom and the North Sea becoming less steep.

IV.—GENERAL NOTES, etc.

At the commencement of the week an anticyclone stretched from the Bay of Biscay to south Germany, while depressions were shown both over Finland and off our western coasts. As the week progressed the anticyclone moved slowly eastwards, and finally, extending from north to south, it formed an elongated area stretching from the southern regions to north Russia or Scandinavia, with comparatively unimportant depressions on its eastern side and rather deep and large disturbances to the westward. These latter moved in a general north-easterly direction either over or outside the United Kingdom, while their secondaries travelled in a similar course further to the south. The winds were, therefore, often fresh or strong from between South and West over all the north-western countries, and mostly light and from some Northerly point over eastern Europe. In the intervening regions a light anticyclonic movement was shown. The chief feature of the week as regards temperature was a sudden burst of heat that occurred over the western part of the continent and the south-east of England, and which subsequently extended in a much modified form to the whole of the British Isles. Rain was again very frequent and occasionally heavy over the most north-western part of our area, and thunderstorms which were experienced over the southern half of England and the north of France on Friday brought heavy falls to those districts also. In the southern and central countries the weather was again almost persistently fine and bright.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 206.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	22·4	- 3·4	23	- 4
STRATHPEFFER SPA	19·4	- 7·6	20	- 8
EDINBURGH	28·9	+ 1·4	30	+ 2
COCKLE PARK	34·5	—	36	—
NEWCASTLE-ON-TYNE	31·8	—	33	—
YORK	29·6	- 0·4	32	0
CROMER	50·0	—	53	—
LOWESTOFT	51·5	—	55	—
DUNMOW	46·6	—	50	—
SHEFFIELD	32·2	—	34	—
WORKSOP	26·0	- 3·8	28	- 4
THURCASTON	31·0	- 1·4	33	- 2
TUNBRIDGE WELLS	49·2	—	53	—
MARGATE	50·5	+12·8	54	+ 14
BROADSTAIRS	55·9	—	60	—
RAMSGATE	—	—	—	—
EASTBOURNE	49·2	+ 6·8	53	+ 7
BRIGHTON	48·4	+ 5·1	52	+ 5
WORTHING	46·2	—	50	—
BOGNOR	53·6†	—	58†	—
WATERGATE PARK	41·1	—	44	—
WESTBOURNE	51·2†	+ 9·2	55†	+ 10
VENTNOR HOSPITAL	36·9	- 6·4	40	- 7
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	30·1	- 4·6	32	- 5
SOUTHPORT	32·5	—	35	—
RHYL	35·8	—	38	—
ABERDOVEY	31·7†	—	34†	—
TENBY	25·1	-14·0	27	- 15
TORQUAY	37·0	- 4·6	40	- 5
NEWQUAY	27·2	-13·2	29	- 14
GUERNSEY	23·3†	-24·1	25†	- 26

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending August 8th, 1903.	York	—	—	—	—	—	—	—	—	—	—	—	44·3	+ 9·3	41	+ 9
,, ,, ,, 15th, ,,	Shaftesbury	69	—	63·8	—	—	—	—	—	6	1·43	+ 0·79	—	—	—	—
,, ,, ,, 22nd, ,,	York	—	—	—	—	—	—	—	—	—	—	—	40·4	+ 7·4	40	+ 7
,, ,, ,, 29th, ,,	Cambridge	70	44	65·4	48·8	56·6	- 3·2	102	0	5	1·20	+ 0·68	21·5	-18·3	22	-19
,, ,, ,, ,, ,,	Liverpool	—	—	—	—	—	—	—	—	—	—	—	32·9	—	34	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 36.] *Third Series.* WEEK ENDING SATURDAY, SEPTEMBER 12TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 212.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	63	38	55·0	43·8	49·1	3 below	50	−19	0	− 1	1462	−147	491	− 50
	1. SCOTLAND, EAST	66	38	56·5	43·6	49·7	3 below	54	−24	0	− 1	1696	−229	502	− 82
	2. ENGLAND, N.E.	66	35	59·1	46·2	52·3	3 below	72	−18	0	0	2011	− 66	342	−137
	3. ENGLAND, EAST	68	38	61·4	47·0	53·9	3 below	83	−19	0	0	2392	− 19	322	−203
	4. MIDLAND COUNTIES	69	36	60·2	45·1	52·3	4 below	72	−24	0	0	2218	−183	355	−180
	5. ENGLAND, SOUTH	71	33	62·0	47·9	54·6	3 below	88	−25	0	0	2512	−109	208	−179
Principal Grazing Districts.	6. SCOTLAND, WEST	62	40	57·0	45·5	50·9	3 below	62	−21	0	0	1922	−110	317	− 96
	7. ENGLAND, N.W.	66	40	58·3	47·3	52·6	3 below	74	−21	0	0	2143	− 77	259	−129
	8. ENGLAND, S.W.	66	38	60·7	49·0	54·6	3 below	88	−15	0	0	2427*	− 18	162	−138
	9. IRELAND, NORTH	64	42	55·9	46·6	51·0	4 below	63	−24	0	0	1969	−182	286	− 61
	10. IRELAND, SOUTH	66	40	59·7	47·8	53·4	3 below	80	−16	0	0	2374	− 58	183	− 67
	— CHANNEL ISLANDS	65	49	62·1	53·5	57·6	2 below	109	−14	0	0	2804	+ 30	49	− 68

Rainfall.

	DISTRICTS. (See p. 212.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	20	9 more	181	+31	48·2	+17·5
	1. SCOTLAND, EAST	6	9	2 more	158	+27	28·1	+ 7·7
	2. ENGLAND, N.E.	5	13	8 more	130	+10	19·9	+ 3·5
	3. ENGLAND, EAST	5	12	7 more	114	− 6	21·1	+ 5·4
	4. MIDLAND COUNTIES	5	15	9 more	127	+11	24·1	+ 5·9
	5. ENGLAND, SOUTH	5	7	0 (average)	130	+18	23·7	+ 6·1
Principal Grazing Districts.	6. SCOTLAND, WEST	5	22	11 more	164	+28	45·1	+13·7
	7. ENGLAND, N.W.	6	27	19 more	152	+25	29·3	+ 7·6
	8. ENGLAND, S.W.	5	13	5 more	145	+17	31·4	+ 7·2
	9. IRELAND, NORTH	7	25	17 more	184	+29	33·3	+ 9·9
	10. IRELAND, SOUTH	6	15	7 more	164	+25	34·0	+ 7·9
	— CHANNEL ISLANDS	6	8	1 more	155	+25	23·9	+ 4·4

Bright Sunshine.

	DISTRICTS. (See p. 212.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	26	+ 2	28	+ 2	832	− 93	24	− 3
	1. SCOTLAND, EAST	36	+ 8	39	+ 9	965	− 95	28	− 3
	2. ENGLAND, N.E.	37	+ 5	41	+ 6	1039	− 77	31	− 2
	3. ENGLAND, EAST	39	+ 3	43	+ 4	1199	− 82	36	− 3
	4. MIDLAND COUNTIES	36	+ 4	40	+ 5	1030	− 79	31	− 2
	5. ENGLAND, SOUTH	38	+ 1	42	+ 1	1269	− 21	38	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	36	+ 7	40	+ 7	1066	− 39	31	− 1
	7. ENGLAND, N.W.	38	+ 8	42	+ 9	1142	+ 43	34	+ 1
	8. ENGLAND, S.W.	42	+ 7	47	+ 8	1227	−101	37	− 3
	9. IRELAND, NORTH	27	0	30	0	926	− 90	27	− 3
	10. IRELAND, SOUTH	33 *	+ 1	36	+ 1	1037	−115	31	− 4
	— CHANNEL ISLANDS	45	+ 2	50	+ 2	1445	− 87	44	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather over the United Kingdom was again of a rough and extremely unsettled type. Rain was experienced on almost every day, and was very heavy in many places on the 8th and 10th. During the latter half of the week thunderstorms occurred in most parts of the country.

Temperature was below the mean, the deficit being 2° in the Channel Islands and 3° or 4° elsewhere. The highest of the maxima were recorded, as a rule, rather early in the week, and varied from 71° in England S., 69° in the Midland Counties, and 68° in England E., to 63° in Scotland N., and to 62° in Scotland W. The lowest of the minima were registered on the night of Friday-Saturday, when the thermometer fell to 33° in England S., 35° in England N.E., and to between 36° and 40° over the Kingdom generally. In the Channel Islands, however, the lowest reading was 49°.

Rainfall was much more than the mean over the country as a whole, but only slightly in excess in Scotland E. and the Channel Islands, while in England S. the fall only just equalled the normal. Both on the 8th and 10th amounts of more than an inch were measured over the northern half of England, and on the latter date at some Irish stations also.

Bright Sunshine exceeded the normal in almost all places. The percentage of the possible duration varied from 50 in the Channel Islands and 47 in England S.W. to 30 in Ireland N. and to 28 in Scotland N.

Barometer and Wind.—The chief characteristic of pressure distribution during this week was the passage of two depressions directly across the United Kingdom—one east-north-eastwards across Scotland during the night of Tuesday, and the other in an easterly direction across Ireland and England during Thursday. With the former there were moderate to strong gales from the south-westward to north-westward, but with that of Thursday the gales over the southern parts of Ireland and England were of exceptional strength, and the baric fall, owing to the quick movement and simultaneous deepening of the system, was extraordinarily rapid. Other depressions of considerable size were seen moving north-eastwards off our most north-western and northern coasts during the earlier days of the week, and during Saturday night a disturbance moved south-eastwards over Ireland to the mouth of the English Channel.

307 | 70 219 | 90 Wy.& S. Ltd. 12 | 02

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	57	41	53·0	44·9	48·8	− 2·0	48	0	7	0·93	+ 0·14	*	*	*	*
	Stornoway	60	41	56·7	44·3	50·2	− 1·3	57	0	7	1·25	+ 0·31	43·4	+ 17·4	47	+ 19
	Wick	62	39	56·0	43·9	49·7	− 2·5	54	0	7	1·12	+ 0·51	*	*	*	*
	Lairg 𝔖	63	38	57·0	41·3	48·8	− 2·8	51	2	7	1·87	+ 1·16	*	*	*	*
	Glencarron	57	41	52·7	43·6	47·9	− 3·7	41	0	7	3·76	+ 2·01	*	*	*	*
	Fort Augustus 𝔖	58	38	54·9	42·4	48·4	− 5·2	45	0	7	1·94	+ 1·05	?13·0	− 5·7	?14	− 6
	Fort William	57	43	54·4	46·4	50·2	− 3·6	57	0	7	3·01	+ 1·39	18·4	− 4·1	20	− 5
1. SCOTLAND, E.	Nairn	64	41	57·1	44·0	50·2	− 3·2	57	0	7	0·88	+ 0·29	*	*	*	*
	Aberdeen	63	41	56·9	44·3	50·3	− 2·9	58	0	6	0·78	+ 0·12	45·8	+ 15·8	50	+ 17
	Braemar 𝔖	57	40	51·7	42·4	46·8	− 3·2	34	0	6	1·08	+ 0·32	*	*	*	*
	Ochtertyre 𝔖	61	38	57·3	42·1	49·3	− 4·4	51	0	4	0·77	− 0·05	*	*	*	*
	Leith	66	41	59·9	46·7	53·0	− 1·7	77	0	5	0·88	+ 0·36	*	*	*	*
	Marchmont 𝔖	61	38	56·1	42·1	48·8	− 4·0	48	0	5	0·92	+ 0·18	33·8	+ 5·7	37	+ 6
2. ENGLAND N.E.	Alnwick Castle	65	41	58·1	45·4	51·5	− 2·2	67	0	6	0·75	+ 0·13	*	*	*	*
	Durham	63	40	57·8	44·7	50·9	− 3·6	62	0	5	0·69	+ 0·17	34·0	+ 5·5	37	+ 6
	Shields	65	42	58·6	46·3	52·2	− 2·2	71	0	5	1·08	+ 0·56	*	*	*	*
	Scarborough 𝔐	66	35	60·4	44·9	52·3	− 3·3	72	0	5	1·73	+ 1·16	42·3	—	47	—
	Spurn Head	65	46	60·1	49·4	54·5	− 2·4	88	0	4	1·95	+ 1·54	*	*	*	*
	Fulbeck (Lincolnshire)	63	41	59·4	46·5	52·6	− 3·5	74	0	4	1·48	+ 0·98	37·6	—	41	—
3. ENGLAND, E.	Hillington 𝔐	67	38	61·1	45·4	52·9	− 3·7	76	0	5	2·20	+ 1·60	37·3	+ 4·2	41	+ 5
	Yarmouth	66	39	60·4	48·6	54·2	− 3·2	85	0	7	1·77	+ 1·19	*	*	*	*
	Geldeston	68	40	62·1	46·4	53·9	− 3·1	83	0	5	1·64	+ 1·10	39·6	+ 1·9	44	+ 2
	Cambridge	68	41	62·8	45·6	53·8	− 3·6	83	0	4	0·88	+ 0·40	36·5	+ 0·8	41	+ 1
	Felixstowe	—	—	—	—	—	—	—	—	4	0·80	—	†	—	†	—
	Rothamsted	65	41	59·9	46·2	52·7	− 3·5	75	0	5	0·98	+ 0·41	40·0	+ 5·4	44	+ 6
	Shoeburyness	67	43	62·3	49·9	55·8	− 2·9	97	0	4	0·24	− 0·21	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	65	37	58·1	43·9	50·7	− 3·7	61	0	5	2·16	+ 1·52	33·7	—	37	—
	Bawtry (Hesley Hall)	66	38	60·9	45·9	53·0	− 2·9	77	0	4	1·70	+ 1·22	*	*	*	*
	Nottingham	64	42	60·3	45·1	52·3	− 4·1	72	0	4	1·68	+ 1·11	39·3	—	43	—
	Loughborough	65	39	61·1	45·1	52·7	− 4·2	75	0	4	1·67	+ 1·11	—	—	—	—
	Colly Weston (Stamford)	65	39	60·6	46·0	53·0	− 3·9	77	0	4	1·57	+ 1·02	*	*	*	*
	Cheadle 𝔐	62	42	57·7	44·4	50·7	− 3·7	61	0	6	2·37	+ 1·65	*	*	*	*
	Birmingham (Edgbaston)	64	41	59·0	46·0	52·2	− 3·8	71	0	5	1·05	+ 0·46	37·1	—	41	—
	Churchstoke 𝔐	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford 𝔐	69	39	62·8	43·6	52·7	− 3·6	75	0	7	0·75	+ 0·18	*	*	*	*
	Cirencester	64	36	60·1	43·9	51·6	− 3·8	67	0	5	1·26	+ 0·59	36·8	+ 3·4	41	+ 4
	Oxford	65	40	60·9	46·9	53·6	− 3·6	81	0	5	0·65	+ 0·10	37·1	+ 1·9	41	+ 2
5. ENGLAND, S.	London	69	39	62·7	47·9	54·9	− 3·6	90	0	3	0·52	+ 0·02	37·5‡	+ 6·3‡	42‡	+ 7‡
	Swarraton (Alresford) 𝔐	65	33	60·0	44·8	52·0	− 3·9	70	0	4	0·80	+ 0·14	*	*	*	*
	Dungeness	70	39	64·3	47·7	55·6	− 3·1	95	0	5	0·55	0·00	40·5	—	45	—
	Hastings (St. Leonards)	67	41	62·1	47·5	54·5	− 4·1	88	0	5	0·88	+ 0·26	43·4	+ 2·6	48	+ 3
	Southampton	71	40	64·5	47·5	55·6	− 3·1	95	0	5	0·98	+ 0·33	39·2	+ 0·5	44	+ 1
	Portland Bill	64	49	60·6	52·9	56·6	− 2·1	102	0	5	0·17	—	*	*	*	*
	Shaftesbury 𝔐	64	40	59·6	47·1	53·1	− 3·2	78	0	5	0·69	− 0·06	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	60	43	56·3	46·6	51·2	− 2·9	64	0	6	2·34	+ 0·77	*	*	*	*
	Glasgow	60	41	55·6	46·1	50·6	− 2·9	60	0	5	1·17	+ 0·30	36·4	+ 12·3	40	+ 14
	Cally 𝔖	62	40	59·9	42·8	50·9	− 2·5	62	0	4	1·93	+ 0·90	*	*	*	*
	Aspatria	61	41	57·3	45·5	51·1	− 3·5	64	0	5	2·17	—	36·1	—	40	—
	Douglas (Isle of Man)	61	43	55·3	46·4	50·9	− 3·4	62	0	6	3·24	+ 2·41	35·6	+ 1·2	39	+ 1
7. ENGLAND, N.W.	Newton Rigg	62	40	57·2	43·5	50·0	− 3·6	56	0	5	1·82	—	38·7	—	43	—
	Stonyhurst	61	43	57·0	46·1	51·3	− 3·5	65	0	6	4·29	+ 3·15	39·4	+ 9·5	43	+ 10
	Blackpool 𝔐	62	43	58·4	49·2	53·6	− 2·5	81	0	6	3·15	+ 2·33	41·5	+ 11·8	46	+ 13
	Manchester (Prestwich)	65	42	59·0	44·8	51·6	− 3·5	67	0	6	3·25	+ 2·37	37·2	—	41	—
	Liverpool Obsy. (Bidston)	61	44	57·9	49·0	53·2	− 3·4	78	0	7	2·32	+ 1·61	—	—	—	—
	Chester (Hawarden Bridge)	66	43	59·7	47·0	53·1	− 4·0	78	0	5	1·46	—	*	*	*	*
	Llandudno 𝔐	63	45	59·4	49·0	54·0	− 3·4	84	0	6	2·31	+ 1·64	33·9	+ 3·5	37	+ 4
	Holyhead	63	47	57·7	50·1	53·7	− 3·2	82	0	6	2·95	+ 2·25	*	*	*	*
8. ENGLAND, S.W.	Llandovery	65	43	61·0	50·4	55·5	− 0·3	95	0	7	3·08	+ 2·06	*	*	*	*
	Pembroke	60	45	58·6	52·7	55·5	− 1·6	95	0	5	1·41	+ 0·67	37·7	+ 1·6	42	+ 2
	Clifton	66	45	61·0	50·2	55·3	− 1·9	93	0	4	1·23	+ 0·46	*	*	*	*
	Bath	65	40	61·7	46·4	53·7	− 3·9	82	0	4	0·65	− 0·02	33·7	—	37	—
	Arlington (N. Devon)	64	43	58·7	47·0	52·6	− 2·9	74	0	6	2·15	+ 1·02	*	*	*	*
	Cullompton 𝔐	66	38	63·1	46·1	54·2	− 3·5	85	0	5	0·72	− 0·02	37·3	+ 2·5	41	+ 3
	Falmouth	64	47	59·8	50·8	55·1	− 2·5	92	0	4	0·82	− 0·11	53·2	+ 14·1	59	+ 16
	Plymouth	65	42	61·3	48·4	54·5	− 3·7	88	0	5	0·69	− 0·08	44·3	+ 6·8	49	+ 8
9. IRELAND, N.	Malin Head	58	45	54·4	47·6	50·8	− 4·3	62	0	7	1·33	+ 0·59	*	*	*	*
	Edenfel (Omagh)	59	42	54·3	44·9	49·4	− 3·9	52	0	7	2·53	+ 1·70	*	*	*	*
	Blacksod Point	59	47	56·4	50·6	53·4	− 2·4	80	0	7	3·29	+ 2·33	*	*	*	*
	Markree Castle	63	42	56·7	45·5	50·8	− 3·2	62	0	7	3·31	+ 2·41	24·4	− 1·4	27	− 2
	Armagh	63	42	57·3	44·9	50·8	− 3·2	62	0	7	2·34	+ 1·67	29·4	+ 2·0	32	+ 2
	Donaghadee	64	42	56·1	45·9	50·8	− 4·2	62	0	7	2·12	+ 1·46	*	*	*	*
10. IRELAND, S.	Dublin	65	41	60·2	47·6	53·6	− 2·8	81	0	6	1·65	+ 1·12	33·7	− 0·3	37	0
	Birr Castle	62	42	58·1	45·0	51·2	− 3·7	64	0	6	2·08	+ 1·39	30·9	+ 0·5	34	+ 1
	Kilkenny	64	40	59·6	46·0	52·5	− 3·3	74	0	6	1·16	+ 0·51	*	*	*	*
	Waterford	60	42	59·1	46·9	52·7	− 3·3	75	0	4	0·82	+ 0·05	*	*	*	*
	Roche's Point	63	45	59·9	49·4	54·4	− 2·4	87	0	7	0·93	+ 0·10	*	*	*	*
	Valencia	61	46	58·9	50·1	54·3	− 2·7	86	0	6	1·37	+ 0·36	33·8	+ 2·0	38	+ 2
	Killarney	66	45	63·4	48·4	55·5	− 0·6	95	0	6	1·82	+ 0·90	*	*	*	*
	Foynes	61	46	58·3	48·7	53·3	− 2·4	79	0	5	2·14	+ 1·40	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	51	61·7	53·7	57·5	− 1·5	109	0	5	0·50	− 0·20	50·9	+ 9·5	57	+ 11
	Jersey	65	49	62·4	53·3	57·6	− 3·3	109	0	6	1·03	+ 0·35	40·1	− 4·6	45	− 5

Stations Marked 𝔐 are in connection with the Royal Meteorological Society, and those marked 𝔖 with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

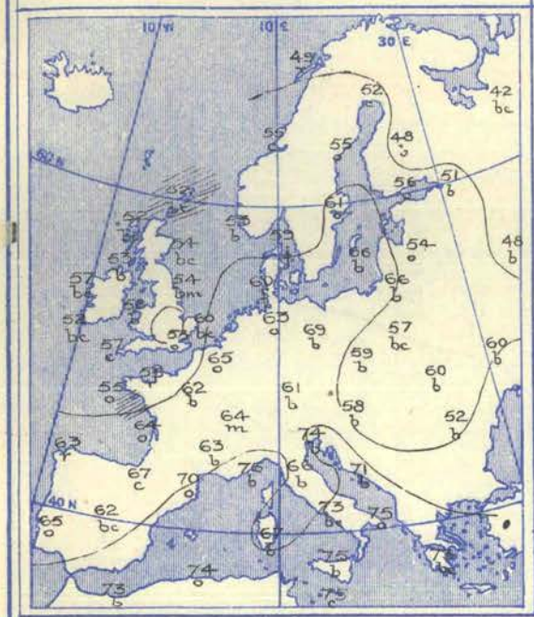
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

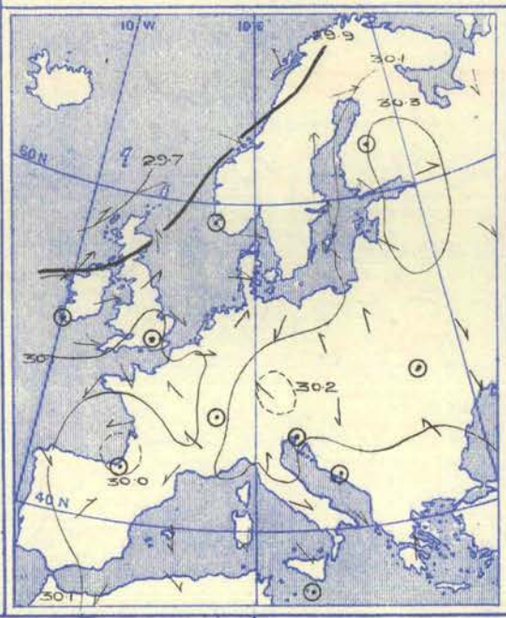
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 6th September, 1903.

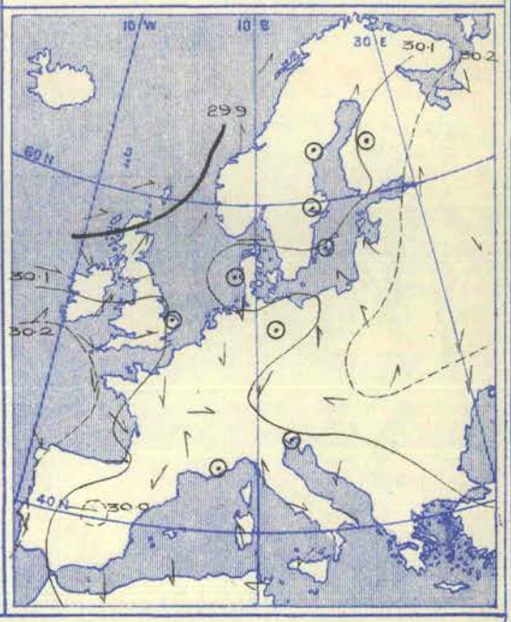
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning variable in our Islands and the western countries generally, but fair in most places. Rainy, however, at Bodö, Jersey, and Corunna, and foggy in Denmark and at Le Havre. Fine and bright in almost all other regions. Slight rain later in many parts of the United Kingdom, and heavy amounts in the Netherlands, and both in the north-east and south-west of France, as well as at Bilbao. As much as 3·3 ins. at the last-named station, 1·7 ins. at Biarritz, 1·3 ins. at Utrecht, and 1·2 ins. at Paris.

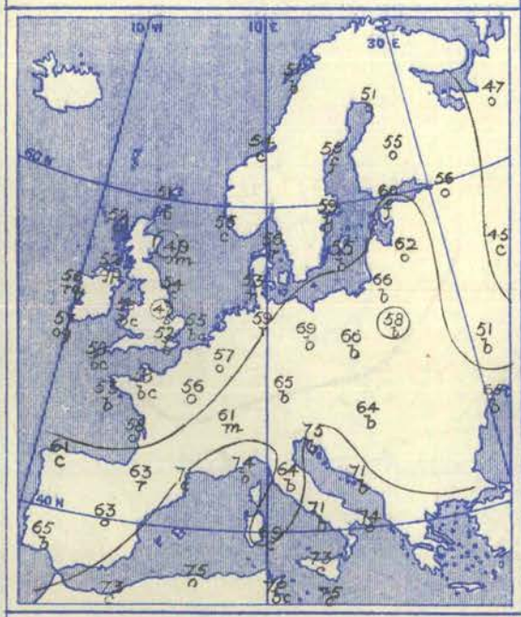
Temperature fallen in our Islands and their vicinity. Readings at 8 a.m. ranging from 80° at Palma, 79° at Barcelona, 74° at Malta and Brindisi, and 74° at Trieste, to 59° at Leith, 46° or 45° over central England, and to 42° at Archangel. Rising during day to 66° at Leith, to 80° or above over Germany, France, and central and southern Europe generally. Highest readings of all, 90° at Florence and 97° at Tunis. Maximum in London only 61°, that at Wisby 70°.

Wind at 8 a.m. light and anticyclonic over the greater part of our area, but South-Westerly (cyclonic) over our western and northern districts, and a light cyclonic circulation shown in the south-west of France. Latter movement becoming transferred further to the eastward by evening. No other important change.

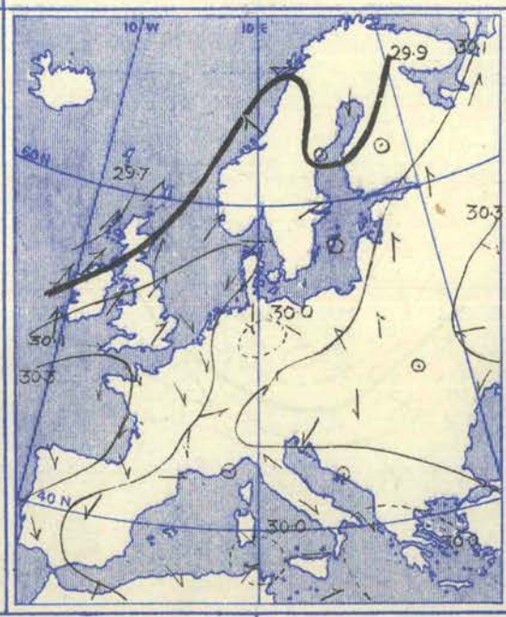
Barometer in morning highest, 30·2 ins. to above 30·3 ins. in a large anticyclone embracing Russia and most of central Europe. Lowest, 29·7 ins. and less in a depression off our extreme north-west coasts. Below 30·0 ins. in a shallow system over the south-western departments of France. Latter disturbance moving eastwards and becoming modified in form during day, and that in the north-west moving away north-eastwards. Anticyclone giving way slowly, but another high-pressure system advancing from the Atlantic to the Bay of Biscay.

Monday, 7th September, 1903.

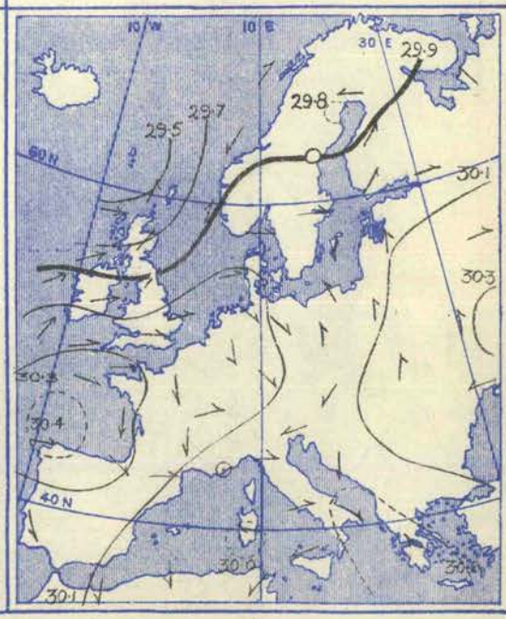
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine and bright over the central and eastern countries, as well as in Italy and the south and east of England. Cloudy or dull elsewhere, with rain at Bilbao and Biarritz, on our own north-west coasts, in Denmark, at the mouth of the Elbe, and at Frankfurt. Rain experienced later in most British and Irish districts and in some parts of France, and also over Finland and Sweden. Heaviest fall 1·0 in. at Clermont.

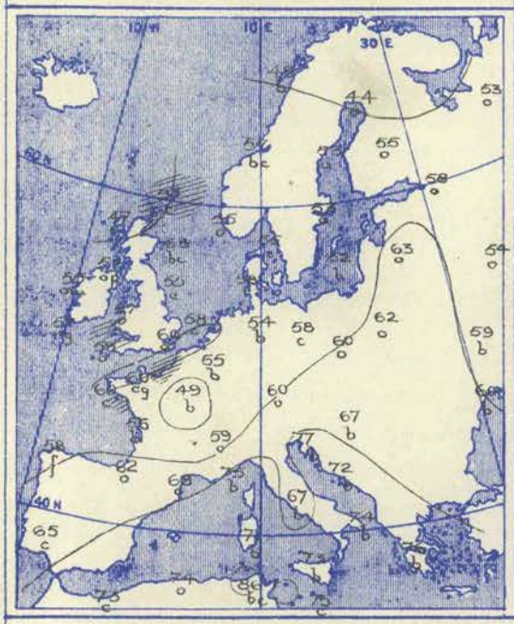
Temperature fallen as a whole, but changed rather irregularly in many places. Readings at 8 a.m. highest, 77° at Sanguinaires, 75° at Algiers, Trieste, and Malta, 74° at Nice, and 69° at Berlin. Lowest, (1) 45° at Moscow, 47° at Archangel, (2) 51° in the north of Scandinavia, (3) 47° at Nottingham. Maxima during day, 69° in London, 73° at St. Petersburg, 80° or above over central and southern Europe. Below 60° in Scotland and the north of Ireland; only 55° at Aberdeen.

Wind in morning showing a feeble cyclonic movement over Germany, and a fresh to very strong South-Westerly wind on our own north-west coasts (a gale at Blacksod Point). Increasing to a gale later in the north of Ireland and the south-west of Norway, and becoming stronger in our Islands and the northern parts of the North Sea generally.

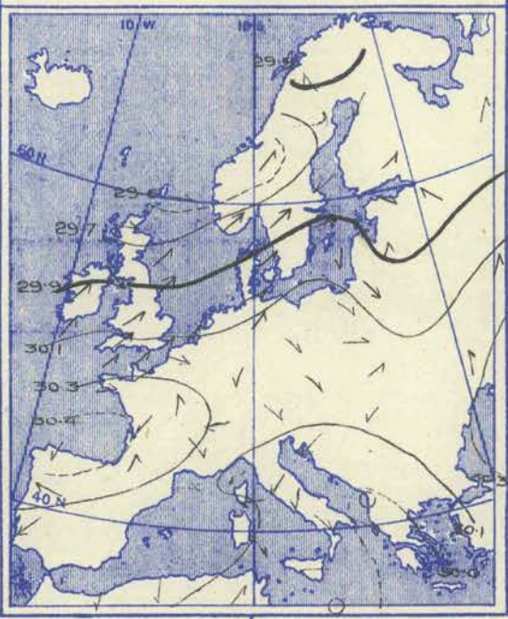
Barometer at 8 a.m. ranging from above 30·3 ins. in the central portion of an anticyclone over central and southern Russia, and from a similar level in another system over the Bay of Biscay and its neighbourhood, to below 30·0 ins. in a shallow depression over Germany, and to below 29·7 ins. in a more important disturbance having its centre to the westward of Scotland. Both disturbances travelling north-eastwards during day, and south-western anticyclone extending slowly eastwards to France and Germany towards the eastern high-pressure system.

Tuesday, 8th September, 1903.

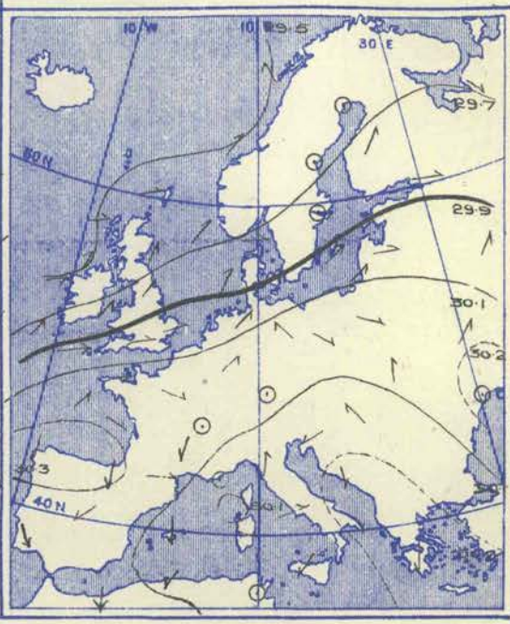
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright except over the Baltic and the most north-western and northern countries, with rain at many Irish stations, at Dungeness, and in the north of Holland. Rain falling throughout the United Kingdom, Holland, Denmark, and Scandinavia later—heavily in several places—and a thunderstorm, accompanied by 3·7 ins. of rain, occurring at Palma. Amount at Blacksod Point 0·9 in., at Holyhead 0·9 in., and at Nottingham 0·8 in.

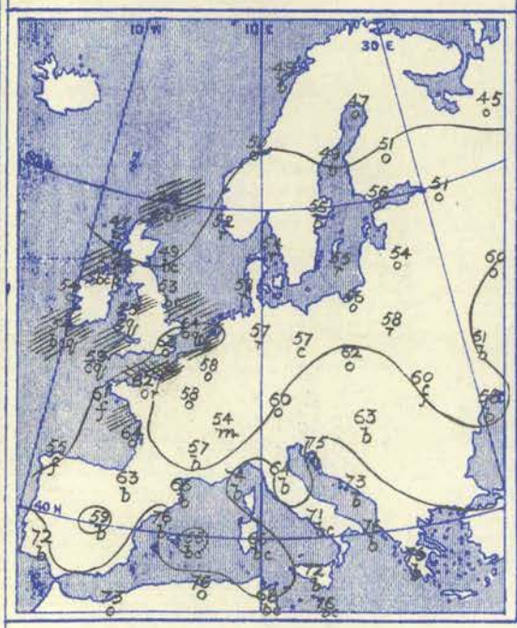
Temperature risen over our Islands and Brittany, fallen in most other regions. Readings at 8 a.m. highest, 86° (locally) at La Calle, 77° at Trieste, 76° in Greece, 75° at Malta, and 71° at Cagliari. Lowest (1) 44° at Haparanda, 49° at Bödo, (2) 44° at Kharkov, (3) 46° at Le Mans, 49° at Paris, (4) 47° at Stornoway. Rising later to 66° in London, 68° in Paris, above 80° in most parts of central and southern Europe, and to 91° at Florence and Tunis. Maximum at Stornoway only 53°.

Wind in morning South-Westerly over our Islands and in the countries to the eastward of the North Sea; moderate or fresh generally, but strong in places. Fresh from the Northward over the Baltic. Light cyclonic airs prevalent over the central and southern countries. Wind backing on our west coasts by evening and increasing greatly in force, and Southerly breezes taking the place of the Northerly winds over the Baltic.

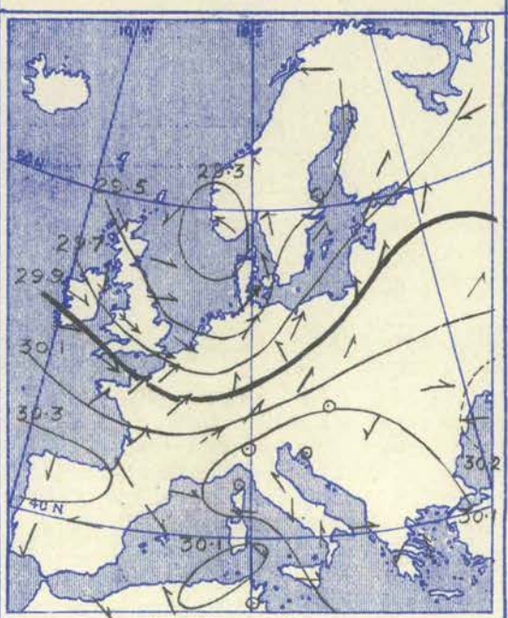
Barometer at 8 a.m. ranging from 30·4 ins. and upwards in the Bay of Biscay, above 30·3 ins. in the south of Russia, and from 30·3 ins. to 30·2 ins. in the intervening regions, to 29·5 ins. in a depression off the west of Norway. Latter system travelling away north-eastwards during day, but another, and deep, disturbance appearing off our north-west coasts. High pressure system decreasing somewhat in intensity, but maintaining the same position.

Wednesday, 9th September, 1903.

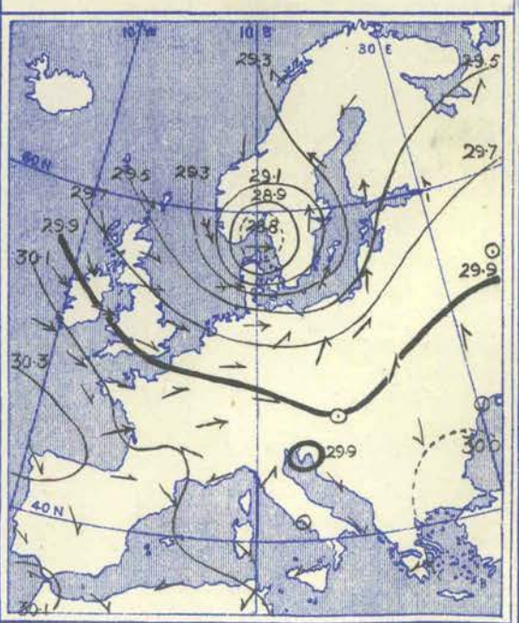
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. changeable over the northern half our of area, with steady rain or passing showers in many places. Fine in most southern regions, but foggy at Corunna. Rain becoming general in nearly all northern countries later—more than half-an-inch at many stations, and as much as 0·72 in. at Karlstad, and 0·87 in. at Memel.

Temperature risen over France, Algeria, and Portugal, fallen elsewhere. Morning readings ranging from 77° at Sanguinaires, and above 70° in the south generally, to 47° in the Shetlands, 49° in the extreme north of Scandinavia and Russia, 54° at Belfort, and to 55° (locally) at Corunna. Rising during day to 70° at Dungeness, to above 70° at some German stations, to above 80° in many parts of southern Europe, to 90° at San Fernando, and to 93° at Tunis.

Wind at 8 a.m. circulating round a depression over the North Sea, the North-Westerly current being strong to a gale over the United Kingdom, and that from South-West to South-East strong on the southern and eastern shores of the North Sea—a gale on the Dutch coast. Light anticyclonic airs still prevailing over the central and southern countries. Wind increasing to a gale from West by evening in Denmark, and from South-West or South over the Baltic and Gulf of Finland. Little change elsewhere.

Barometer in morning highest, above 30·3 ins. in an anticyclone stretching from the Atlantic over the north of Spain, 30·2 ins. in the south of Russia, and above 30·1 ins. in most of the central regions. Lowest, 29·2 ins. and less, in a disturbance over the North Sea. Latter system subsequently travelling eastwards to the south of Norway, and pressure falling very quickly in that region and rather decidedly over central Europe and the south of Russia. Rising steadily over Great Britain and Ireland.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 37.] *Third Series.* WEEK ENDING SATURDAY, SEPTEMBER 19TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 218.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	68	32	58·8	42·0	50·0	1 below	56	− 8	0	− 2	1518	− 155	491	− 52
	1. SCOTLAND, EAST	68	27	58·1	39·6	48·4	4 below	55	−17	7	+ 5	1751	−246	509	− 77
	2. ENGLAND, N.E.	66	31	57·3	42·3	49·5	5 below	53	31	0	− 1	2064	− 97	342	−138
	3. ENGLAND, EAST	67	35	59·3	43·5	51·0	5 below	63	−33	0	− 1	2455	− 52	322	−204
	4. MIDLAND COUNTIES	68	32	58·8	40·0	49·0	6 below	57	−31	6	+ 5	2275	−214	361	−175
	5. ENGLAND, SOUTH	68	34	59·9	44·8	52·0	5 below	70	−34	0	− 1	2582	−143	208	−180
Principal Grazing Districts.	6. SCOTLAND, WEST	66	31	58·8	39·6	48·7	5 below	57	−19	7	+ 6	1979	−129	324	− 90
	7. ENGLAND, N.W.	68	29	58·6	41·1	49·5	6 below	56	−31	3	+ 2	2199	−108	262	−127
	8. ENGLAND, S.W.	68	32	59·6	44·1	51·5	5 below	67	−30	0	0	2494	− 48	162	−138
	9. IRELAND, NORTH	63	34	58·6	44·9	51·5	2 below	67	−14	0	− 1	2036	−196	286	− 62
	10. IRELAND, SOUTH	67	32	60·2	45·4	52·4	3 below	73	−17	0	0	2447	− 75	183	− 67
	— CHANNEL ISLANDS	65	45	60·1	49·3	54·5	5 below	88	−30	0	0	2892	0	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 218.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	less than half	11 less	183	+29	48·1*	+16·4	48	+24	54	+28	880	− 69	25	− 2
	1. SCOTLAND, EAST	2	1	6 less	160	+25	28·2	+ 7·2	37	+10	42	+12	1002	− 84	29	− 2
	2. ENGLAND, N.E.	3	1	4 less	133	+10	20·0	+ 3·1	40	+11	46	+13	1079	− 66	31	− 2
	3. ENGLAND, EAST	3	2	3 less	117	− 6	21·3	+ 5·1	39	+ 7	45	+ 8	1238	− 76	36	− 2
	4. MIDLAND COUNTIES	1	less than half	6 less	128	+ 9	24·1	+ 5·3	40	+12	46	+14	1070	− 67	31	− 2
	5. ENGLAND, SOUTH	1	less than half	6 less	131	+16	23·7	+ 5·5	45	+10	52	+12	1314	− 11	38	0
Principal Grazing Districts.	6. SCOTLAND, WEST	0	—	11 less	164	+24	45·1	+12·6	47	+17	54	+19	1113	− 22	32	− 1
	7. ENGLAND, N.W.	0	less than half	8 less	152	+21	29·3	+ 6·8	51	+25	59	+28	1192*	+ 68	34	+ 2
	8. ENGLAND, S.W.	0	—	9 less	145	+13	31·4	+ 6·4	50	+18	58	+20	1277	− 83	37	− 2
	9. IRELAND, NORTH	1	1	7 less	185	+26	33·4	+ 9·2	43	+17	50	+20	969	− 73	28	− 2
	10. IRELAND, SOUTH	1	4	4 less	165	+23	34·4	+ 7·5	45	+13	51	+15	1082	−101	31	− 3
	— CHANNEL ISLANDS	1	1	7 less	156	+22	24·0	+ 3·8	54	+13	62	+14	1499	− 74	44	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week has been fine and dry as a whole, but heavy rain was experienced in the extreme south-west of Ireland on the 17th, and occasional slight falls over the east and north-east of Great Britain.

Temperature was much below the normal generally; in most districts the deficit amounted to as much as 5° or 6°, but in Ireland N. it was only 2°, and in Scotland N. only 1°. The highest of the maxima were registered towards the end of the week, and varied from 68° or 67° in the majority of the districts to 63° in Ireland N. The lowest of the minima, which were recorded during the earlier half of the period, varied from 27° in Scotland E. and 29° in England N.W. to 34° in England S. and Ireland N., and to 45° in the Channel Islands.

Rainfall was less than the mean in all districts. In several parts of the country the weather was quite rainless.

Bright Sunshine exceeded the normal very generally, the percentages of the possible duration ranging from 62 in the Channel Islands, 59 in England N.W., and 58 in England S.W. to 42 in Scotland E.

Barometer and Wind.—At the commencement of the week a depression which had come in from the north-westward lay near Scilly, and the wind was blowing strongly from the Northward over Ireland, with a briskly rising barometer. This baric rise heralded the approach of an anticyclone, which, during the remainder of the period, was the dominating feature of pressure distribution either over or to the north-eastward of our Islands. No depressions advanced directly over the Kingdom, but some of considerable size passed northwards outside the western Irish and Scotch coasts, while some smaller ones over the Bay of Biscay affected our southern and south-western districts, and others, which moved north-westwards from Germany, made their influence felt in the south-east and east. The prevailing North-Easterly to South-Easterly winds were consequently fresh or strong at times in the southern districts, while the Southerly and South-Easterly current in the far west attained the force of a moderate to fresh gale.

307 | 70 219 | 90 Wy.& S. Ltd. 12 | 02

II.—DATA from which the SUMMARY on page 217 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head Ⓢ	56	40	53·6	45·1	49·2	- 1·2	50	0	1	0·01	- 0·81	*	*	*	*
	Stornoway	65	36	59·3	42·1	50·3	- 0·7	58	0	2	0·04	- 0·93	53·3	+ 28·4	61	+ 32
	Wick Ⓢ	57	37	55·4	44·6	49·7	- 1·8	54	0	4	0·10	- 0·54	*	*	*	*
	Lairg Ⓢ	67	32	62·6	39·0	50·2	0·0	70	8	1	0·01	- 0·73	*	*	*	*
	Glencarron Ⓢ	68	33	60·6	41·4	50·5	- 0·4	62	2	1	0·03	- 1·77	*	*	*	*
	Fort Augustus Ⓢ	67	33	59·7	39·6	49·2	- 3·7	60	7	1	0·03	- 0·91	41·4	+ 23·0	47	+ 26
	Fort William	66	36	60·5	42·1	50·9	- 2·3	62	0	1	0·01	- 1·67	49·4	+ 27·2	56	+ 31
1. SCOTLAND, E.	Nairn	68	31	61·1	38·6	49·3	- 3·3	65	10	1	0·01	- 0·57	*	*	*	*
	Aberdeen	58	33	54·3	42·4	48·1	- 4·6	43	0	4	0·13	- 0·54	38·9	+ 10·3	44	+ 12
	Braemar Ⓢ	61	27	56·2	36·4	45·8	- 3·5	50	16	1	0·15	- 0·62	*	*	*	*
	Ochtertyre Ⓢ	65	33	60·1	38·9	49·0	- 3·8	62	9	2	0·03	- 0·77	*	*	*	*
	Leith Ⓢ	67	35	60·3	41·0	50·2	- 4·1	62	3	0	0·00	- 0·49	*	*	*	*
	Marchmont Ⓢ	63	34	56·6	40·0	47·9	- 4·1	50	6	3	0·16	- 0·57	39·8	+ 13·3	45	+ 15
2. ENGLAND N.E.	Alnwick Castle	61	31	56·2	38·8	47·1	- 5·8	49	9	5	0·25	- 0·38	*	*	*	*
	Durham	62	32	56·6	39·3	47·5	- 6·3	50	8	3	0·10	- 0·43	38·6	+ 11·4	44	+ 13
	Shields	62	39	55·7	42·7	48·9	- 5·0	48	0	4	0·20	- 0·30	*	*	*	*
	Scarborough Ⓜ	61	38	56·6	43·6	49·8	- 5·1	55	0	5	0·20	- 0·37	37·7	—	43	—
	Spurn Head	62	42	58·4	46·7	52·3	- 3·9	72	0	1	0·03	- 0·41	*	*	*	*
	Fulbeck (Lincolnshire)	66	35	60·3	42·9	51·2	- 4·1	64	0	1	0·02	- 0·45	42·6	—	49	—
3. ENGLAND, E.	Hillington Ⓜ	65	36	58·9	43·5	50·8	- 4·8	62	0	3	0·31	- 0·29	37·7	+ 6·5	43	+ 7
	Yarmouth	62	41	58·1	45·7	51·6	- 4·9	67	0	4	0·66	+ 0·06	*	*	*	*
	Geldeston	64	37	59·9	43·2	51·2	- 5·2	64	0	5	0·32	- 0·23	36·4	+ 0·4	42	0
	Cambridge	67	38	61·4	41·6	51·0	- 5·4	65	1	0	0·00	- 0·47	39·8	+ 5·5	46	+ 6
	Felixstowe	61	42	57·6	46·0	51·5	- 4·5	67	0	4	0·29	—	46·0†	—	53†	—
	Rothamsted	63	35	58·5	40·4	49·0	- 6·1	56	4	1	0·01	- 0·58	47·0	+ 14·5	54	+ 17
	Shoeburyness	63	39	60·4	44·3	52·0	- 5·7	70	0	1	0·04	- 0·44	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	62	37	57·3	39·3	47·9	- 5·8	53	8	2	0·09	- 0·58	41·4	—	48	—
	Bawtry (Hesley Hall)	68	36	59·6	39·1	48·9	- 6·2	60	8	2	0·04	- 0·47	*	*	*	*
	Nottingham	65	35	59·4	40·4	49·4	- 6·1	59	4	3	0·04	- 0·53	41·4	—	48	—
	Loughborough	67	34	59·9	38·8	48·9	- 7·1	62	9	3	0·03	- 0·52	—	—	—	—
	Colly Weston (Stamford)	65	38	61·1	41·1	50·6	- 5·5	64	3	0	0·00	- 0·56	*	*	*	*
	Cheadle Ⓜ	62	37	57·2	40·2	48·3	- 5·3	52	5	0	0·00	- 0·71	*	*	*	*
	Birmingham (Edgbaston)	63	38	57·5	41·9	49·3	- 5·7	52	0	0	0·00	- 0·58	34·5	—	40	—
	Churchstoke Ⓜ	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	64	32	58·6	38·5	48·1	- 7·2	57	10	0	0·00	- 0·59	*	*	*	*
	Cirencester	63	35	57·7	39·0	47·9	- 6·7	54	8	0	0·00	- 0·66	40·4	+ 8·8	47	+ 10
	Oxford	65	38	59·7	41·7	50·3	- 5·8	59	1	0	0·00	- 0·55	44·1	+ 10·6	51	+ 12
5. ENGLAND, S.	London	68	38	62·1	44·0	52·6	- 5·1	74	0	1	0·01	- 0·51	40·2‡	+ 10·8‡	46‡	+ 12‡
	Swarraton (Alresford) Ⓜ	64	34	58·5	40·2	48·9	- 6·1	56	5	0	0·00	- 0·67	*	*	*	*
	Dungeness	63	43	61·1	46·3	53·3	- 4·9	79	0	4	0·06	- 0·54	47·9	—	55	—
	Hastings (St. Leonards)	63	45	60·0	47·3	53·4	- 4·8	80	0	1	0·04	- 0·60	49·6	+ 10·5	57	+ 12
	Southampton	66	41	62·0	44·1	52·6	- 5·1	74	0	0	0·00	- 0·66	46·9	+ 10·2	54	+ 12
	Portland Bill	64	43	60·0	48·0	53·7	- 4·5	82	0	1	0·01	—	*	*	*	*
	Shaftesbury Ⓜ	61	40	55·8	43·7	49·5	- 5·9	53	0	1	0·01	- 0·76	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	66	34	61·4	41·6	51·0	- 2·3	65	1	0	0·00	- 1·66	*	*	*	*
	Glasgow	63	36	57·2	40·3	48·3	- 4·4	51	5	0	0·00	- 0·87	40·9	+ 18·3	47	+ 21
	Cally Ⓢ	60	31	57·8	37·1	47·0	- 5·9	56	14	0	0·00	- 1·04	*	*	*	*
	Aspatria	66	34	59·8	38·1	48·4	- 5·4	61	11	0	0·00	—	51·8	—	60	—
	Douglas (Isle of Man)	61	33	57·9	40·8	48·9	- 4·8	53	3	0	0·00	- 0·84	48·7	+ 15·8	56	+ 18
7. ENGLAND, N.W.	Newton Rigg	62	29	59·4	35·4	46·8	- 6·1	61	18	0	0·00	—	49·6	—	57	—
	Stonyhurst	62	36	57·2	40·5	48·5	- 5·5	52	4	0	0·00	- 1·14	48·2	+ 19·6	55	+ 23
	Blackpool Ⓜ	65	34	59·2	39·2	48·7	- 6·5	59	8	1	0·02	- 0·82	57·4	+ 29·2	66	+ 34
	Manchester (Prestwich)	65	35	59·4	40·1	49·3	- 4·9	59	5	0	0·00	- 0·90	40·8	—	47	—
	Liverpool Obsy. (Bidston)	63	41	57·3	43·4	50·0	- 6·0	56	0	1	0·02	- 0·71	51·5	—	59	—
	Chester (Hawarden Bridge)	66	33	59·2	40·4	49·4	- 7·1	59	4	0	0·00	—	*	*	*	*
	Llandudno Ⓜ	68	39	59·4	44·1	51·4	- 5·2	66	0	1	0·02	- 0·68	54·1	+ 25·6	62	+ 29
	Holyhead	65	42	58·0	46·0	51·7	- 4·5	68	0	0	0·00	- 0·72	*	*	*	*
8. ENGLAND, S.W.	Llandovery	68	37	62·6	44·1	52·9	- 2·0	76	0	0	0·00	- 1·03	*	*	*	*
	Pembroke	62	43	59·1	47·3	52·9	- 3·7	76	0	0	0·00	- 0·76	53·6	+ 19·3	62	+ 22
	Clifton	64	40	59·4	44·3	51·5	- 4·6	67	0	1	0·01	- 0·76	*	*	*	*
	Bath	65	37	59·3	40·7	49·6	- 7·3	59	4	0	0·00	- 0·67	36·5	—	42	—
	Arlington (N. Devon)	62	36	58·4	42·1	49·9	- 5·2	55	0	0	0·00	- 1·13	*	*	*	*
	Cullompton Ⓜ	65	32	60·5	39·0	49·2	- 7·4	63	8	0	0·00	- 0·74	50·4	+ 17·0	58	+ 20
	Falmouth	61	44	57·7	48·4	52·8	- 4·3	76	0	1	0·02	- 0·95	52·3	+ 15·3	60	+ 18
	Plymouth	63	43	59·6	47·1	53·1	- 4·2	78	0	0	0·00	- 0·77	53·9	+ 18·3	62	+ 21
9. IRELAND, N.	Malin Head	61	44	57·3	47·1	52·0	- 2·5	70	0	0	0·00	- 0·74	*	*	*	*
	Edenfel (Omagh)	63	36	59·6	42·0	50·4	- 1·9	59	0	1	0·04	- 0·76	*	*	*	*
	Blacksod Point	62	40	58·7	49·4	53·8	- 1·7	83	0	4	0·46	- 0·48	*	*	*	*
	Markree Castle	63	34	59·7	43·7	51·3	- 1·8	65	0	2	0·06	- 0·83	41·7	+ 16·7	48	+ 19
	Armagh	62	35	59·2	41·7	50·0	- 3·1	57	1	0	0·00	- 0·65	44·4	+ 17·4	51	+ 20
	Donaghadee	59	41	57·3	45·7	51·2	- 3·1	64	0	1	0·01	- 0·63	*	*	*	*
10. IRELAND, S.	Dublin	64	38	58·9	43·9	51·0	- 4·6	63	0	1	0·06	- 0·47	46·3	+ 12·8	53	+ 15
	Birr Castle	63	35	60·1	43·1	51·2	- 2·9	64	0	1	0·02	- 0·64	48·7	+ 19·0	56	+ 22
	Kilkenny	63	32	59·4	42·1	50·3	- 4·5	58	0	2	0·06	- 0·57	*	*	*	*
	Waterford	65	38	60·7	46·9	53·5	- 1·8	81	0	0	0·00	- 0·75	*	*	*	*
	Roche's Point	60	42	59·0	48·3	53·4	- 2·8	80	0	1	0·01	- 0·83	*	*	*	*
	Valencia	64	37	60·3	48·3	54·0	- 2·3	84	0	2	1·54	+ 0·54	38·9	+ 7·9	45	+ 9
	Killarney	67	36	61·4	47·1	53·9	- 1·4	83	0	3	1·03	+ 0·13	*	*	*	*
	Foynes	65	36	61·6	43·3	52·0	- 3·1	70	0	1	0·05	- 0·65	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	47	59·3	49·1	54·0	- 4·4	84	0	1	0·07	- 0·68	54·2	+ 14·8	62	+ 17
	Jersey	65	45	60·9	49·4	54·9	- 5·4	90	0	1	0·07	- 0·64	59·2	+ 16·5	68	+ 19

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

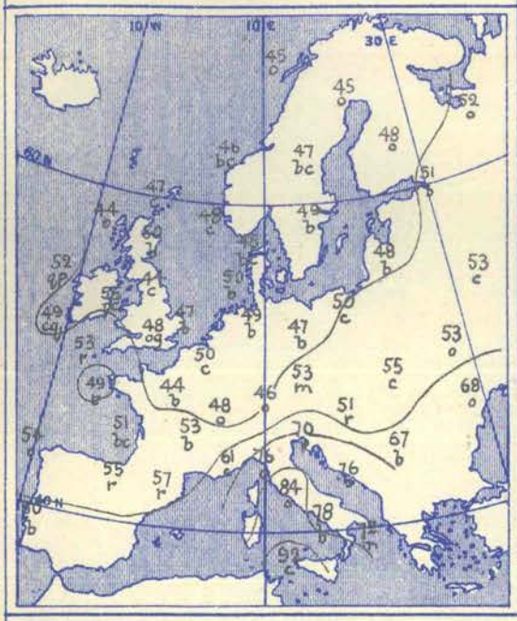
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

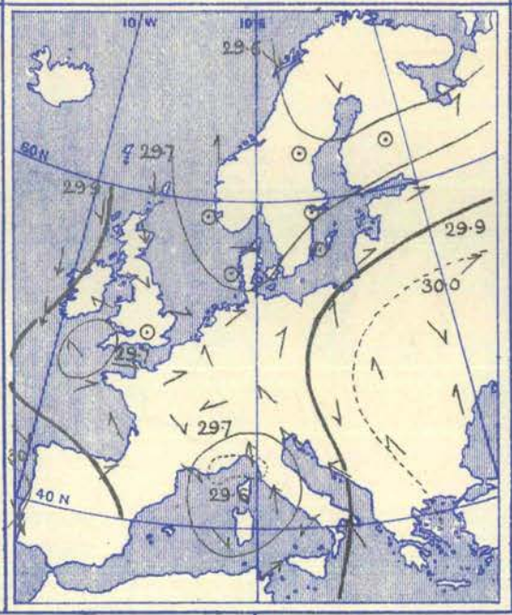
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 13th September, 1903.

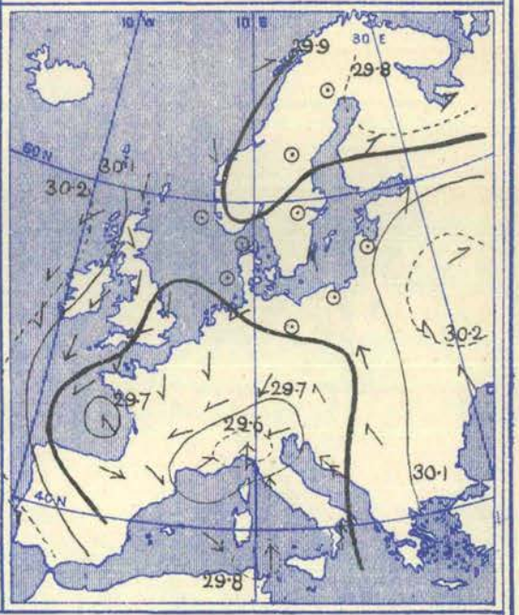
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in several parts of the United Kingdom and northern Europe and also in Portugal; cloudy or dull elsewhere, with rain at Scilly or Jersey, thunder and rain in Brittany, and rain in the south of France, the north of Italy, and at some stations in central Europe. Rain general later in France and the central countries—heavy in places. A thunderstorm and 2·17 ins. of rain experienced at Biarritz, and thunder occurring at Dungeness.

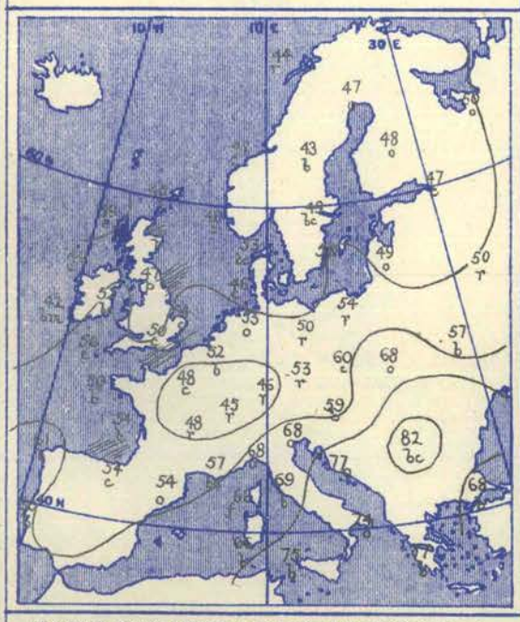
Temperature fallen as a whole, but risen in the far south. Readings in morning as high as 92° at Palermo, 84° at Rome, and 81° at Cagliari. Below 50° over all the more northern regions and as low as 44° at Paris and 42° at Nottingham. Continuing very low all day except in the most southern regions. Maximum at Munich 52°, in London 58°, and at Paris 61°, but as high as 84° at Hermanstadt, 91° at Rome, 93° at Pesaro, and 108° at Palermo.

Wind in morning showing cyclonic circulations of no great strength around the Scilly Isles and the Gulf of Genoa. Light and rather variable over eastern and northern Europe, and North-Westerly (anticyclonic) over Spain and Portugal. No general change later, but Northerly current becoming established over the United Kingdom and wind increasing in strength over southern Europe; a fresh gale from East-South-East setting in at Lesina.

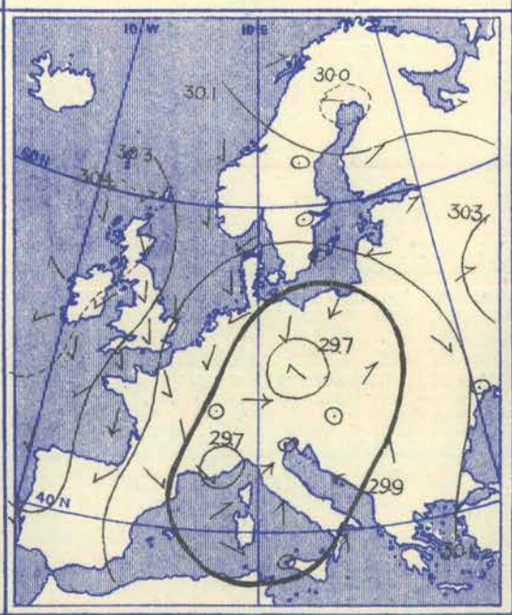
Barometer at 8 a.m. ranging from 30·1 ins. in an anticyclone extending from the ocean to Portugal, and above 30·0 ins. in Roumania, Hungary, and the southern half of Russia, to about 29·6 ins. in a depression of little depth having its centre near the Scilly Islands, to a rather lower figure in a shallow system over and to the northward of northern Scandinavia, and also in an elongated disturbance over the Gulf of Genoa and the surrounding territory. Depression near Scilly travelling south-eastwards during day, and that in the far north disappearing. An anticyclone approaching our Islands from the Atlantic.

Monday, 14th September, 1903.

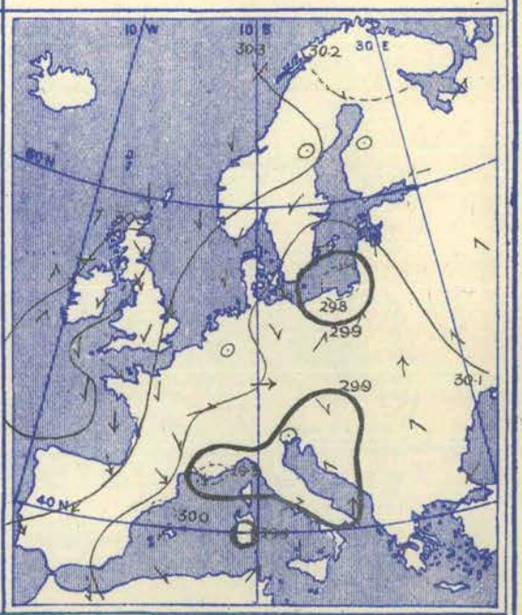
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in most parts of the United Kingdom and Scandinavia, and at several Spanish stations; cloudy or overcast generally, with showers along our east coast and steady rain over Italy, the Baltic, and at St. Petersburg. Heavy rain later over France and all the central countries, as well as in the north of Italy and at Wisby. More than an inch at Leghorn and Florence, and 1·3 ins. at Swinemünde. Thunderstorms occurring in different parts of France.

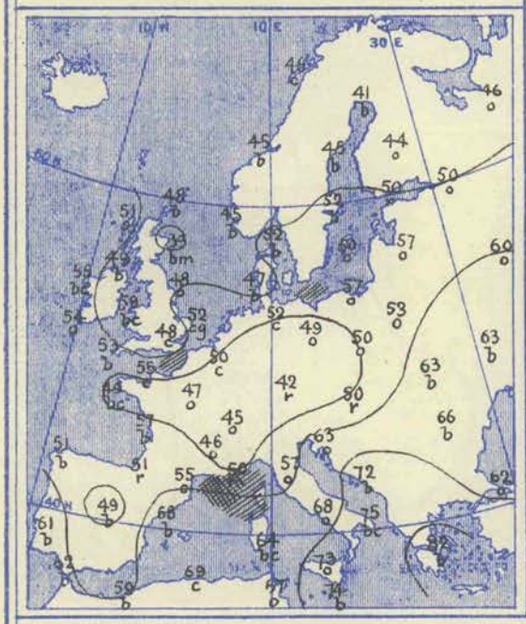
Temperature fallen quickly in Italy, risen equally quickly in Austria-Hungary. Readings at 8 a.m. ranging from 82° at Hermanstadt, 77° at Pesaro, and 75° at Palermo, to 62° at Florence, 54° at Perpignan, and to below 50° over central France and in most northern regions. Lowest values, 44° at Bodö and 39° at Stornoway. Rising later to 93° at Athens, 88° at Tunis, to above 80° at most Italian stations and in southern Austria, as well as at San Fernando. Only touching 52° at Belfort and 50° at Munich, and remaining below 60° throughout the United Kingdom.

Wind in morning showing cyclonic circulations around the centre of Europe and Lombardy and another over Lapland. Northerly winds strong or fresh over the Baltic and along our east coast, and the South-Westerly current strong at Leghorn; very little force elsewhere. North-Westerly wind increasing in strength in the south of France by evening and increasing to a gale on the north German coast. Little change as a whole later.

Barometer at 8 a.m. highest, 30·4 ins. and above, in an anticyclone extending from the Atlantic to Ireland and Scotland, and above 30·3 ins. in another over central Russia. Lowest, 29·7 ins. and less, in two minima—one over central Europe and the other near Turin. Below 30·0 ins. in a shallow system near Haparanda. Latter disappearing later and that over central Europe travelling north-eastwards to East Prussia. Russian anticyclone receding eastwards or giving way, but that off our western coasts coming in over our Islands and the Bay of Biscay.

Tuesday, 15th September, 1903.

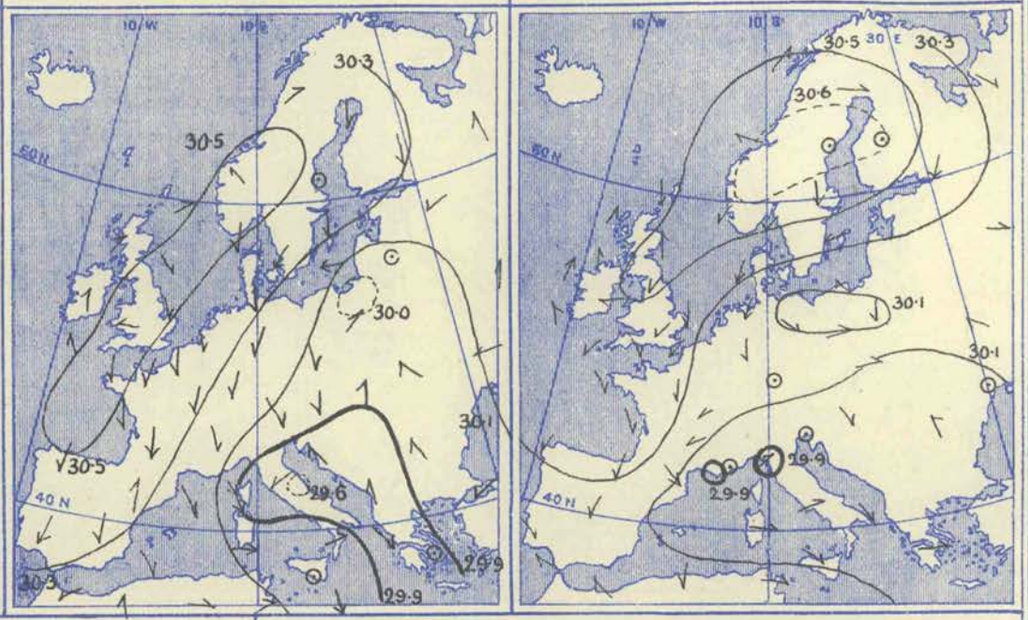
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine and bright in many parts of south-eastern and southern Europe and at several of our own stations, but cloudy or overcast as a whole, rainy at Hangö and Biarritz and in some parts of Germany and Austria, and a thunderstorm in progress at Sanguinaires. Considerable or heavy amounts of rain falling on most parts of the Continent later (except in Russia); as much as 2·2 ins. at Sanguinaires.

Temperature lower than of late in most Continental regions. Morning readings ranging from 82° at Athens, 75° at Brindisi, and 74° at Malta, to 63° at Kiev, 60° at St. Petersburg, and to below 50° over central Spain, the major portion of France, the United Kingdom, Scandinavia, and the northern half of Russia. Continuing very low all day over the northern countries, but rising to between 70° and 80° in the south generally, to 89° at Brindisi, and to 93° at Athens.

Barometer and Wind. 8 a.m. 6 p.m.

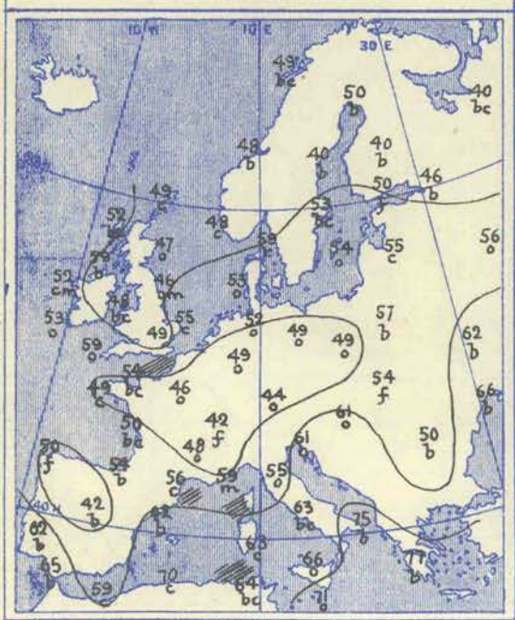


Wind in morning light and anticyclonic over the United Kingdom and the most north-western countries of the Continent. Irregularly cyclonic elsewhere; not of much strength as a whole, but North-Westerly wind blowing a fresh gale at Cape Sicié and a strong breeze at Malta. Gale at Sicié subsiding by evening, but a strong North-North-East wind setting in over Denmark, the north-west of Germany and the Baltic.

Barometer at 8 a.m. ranging from 30·5 ins. in a long anticyclonic band stretching from Coruna to the north of Scandinavia, to below 30·0 ins. in a depression over east Prussia, and to below 29·9 ins. in an irregularly shaped depression covering the Gulf of Genoa, the north of Italy, and extending eastwards to Buda-Pesth and Athens. Gradients steep in the south-east of France. Anticyclonic centre increasing in intensity later and becoming transferred to Scandinavia. Gradients to the northward of Prussian disturbance growing steeper.

Wednesday, 16th September, 1903.

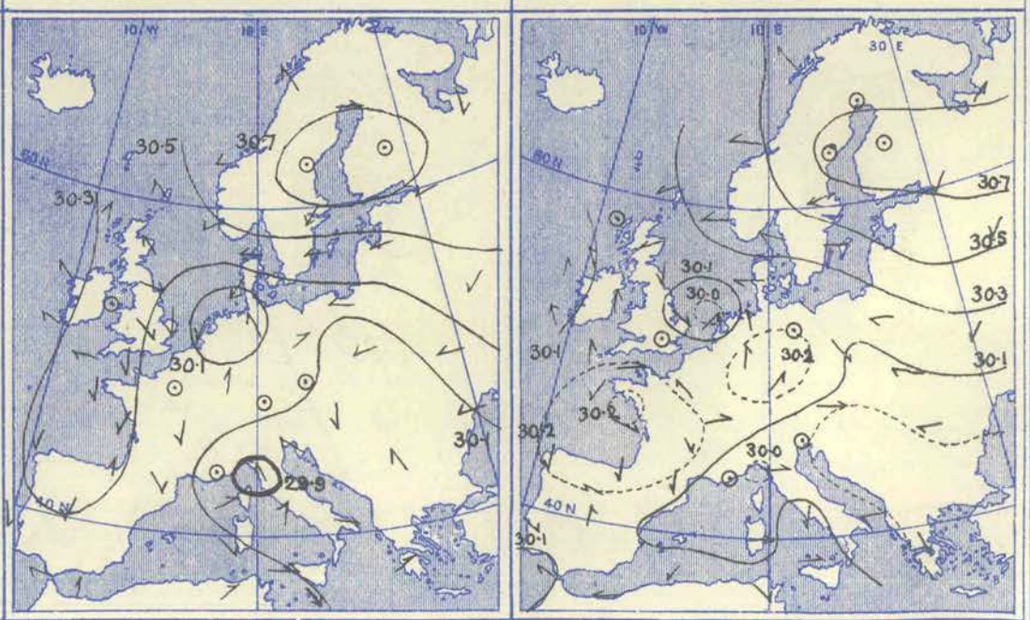
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine and bright as a whole, but dull in most parts of Austria, Germany, and the Netherlands, with rain in places. Fog prevailing at Neu Fahrwasser, Cracow, and Corunna. Rain later in many parts of central Europe, the Netherlands, Denmark, and northern Italy, and a thunderstorm occurring at Sanguinaires—largest rainfall, 0·63 in. at Florence.

Temperature fallen generally, but risen at most Scandinavian stations. Morning readings highest, 77° at Patras, 75° at Brindisi, and 70° at Algiers. Lowest, (1) 40° at Archangel, Kuopio and Hernösand, (2) 41° at Bath and 44° at Liverpool, (3) 42° at Belfort and 44° at Munich, (4) 42° at Madrid, (5) 51° at Nice. Just exceeding 60° during day at a few of our own stations and at Paris, but only rising to 50° at Munich. Maxima above 70° in most southern regions and above 80° at a few places. Highest values, 86° at Patras and 95° at Athens.

Barometer and Wind. 8 a.m. 6 p.m.

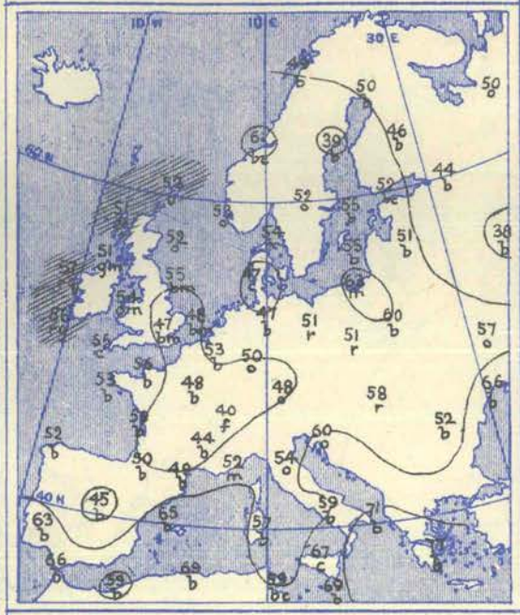


Wind in morning anticyclonic in the far north and over the United Kingdom and the Spanish Peninsula, but circulating cyclonically round the north-west of Germany and the Gulf of Genoa. Light or moderate in force generally, but North-Easterly and Easterly current strong over the Baltic and Denmark, and Northerly winds fresh or strong on the east coast of England. Little change in direction later, but decreasing in force except in the south of Sweden.

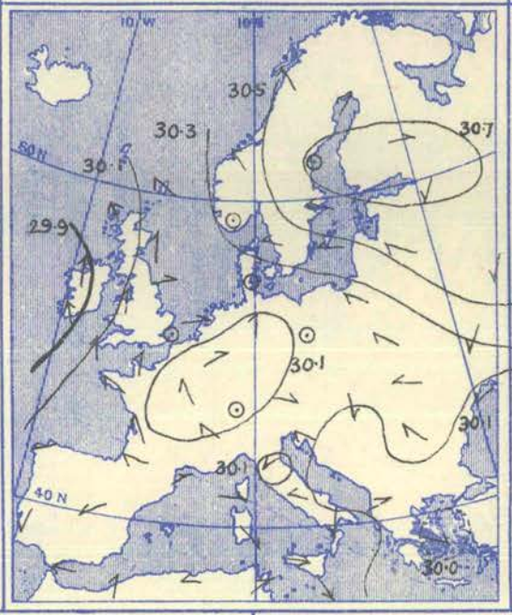
Barometer at 8 a.m. ranging from 30·7 ins. in an anticyclone over Finland and its neighbourhood, and from 30·3 ins. in a long band embracing nearly the whole of the United Kingdom with the Bay of Biscay and the north of Spain, to about 30·0 ins. in a depression having its centre near Hanover, and to below 29·9 ins. in another minimum a little to the westward of Leghorn. A steady decrease of pressure in progress in the western countries. German disturbance moving north-westwards to Holland later; a secondary "high" forming over southern and central Germany, and another over the Bay of Biscay and the west of France. Pressure continuing to decrease over our Islands—most in the west.

Thursday, 17th September, 1903.

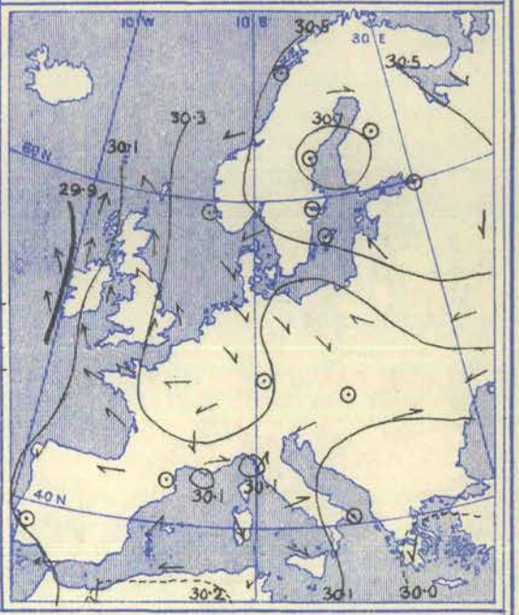
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in most parts of our area, but rainy or dull in the central countries and on the west coast of Ireland, and foggy at Copenhagen, Belfort, and Nottingham. Rain falling later over Germany and at Buda-Pesth and throughout Ireland. Amounts not heavy generally, but as much as 1·34 ins. at Valencia.

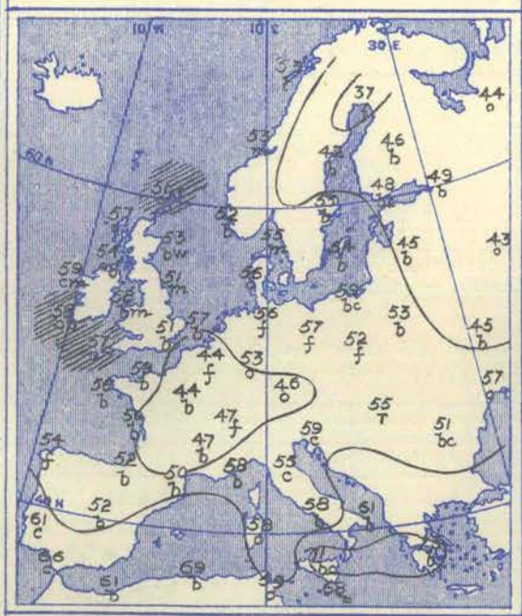
Temperature fallen at most southern stations, risen at many of those in the far north and over the United Kingdom. Morning readings highest, 77° at Athens, 71° at Brindisi, and 69° at Malta and Algiers. Lowest, (1) 38° at Moscow and 39° at Hernösand, (2) 40° at Nottingham, (3) 40° at Belfort, (4) 45° at Madrid and 49° at Perpignan. Rising later to 66° in London, to 70° or above in the south of France and in Italy, to about 80° at Hermanstadt and at some Spanish stations and at Aumale, and to 88° at Athens.

Wind in morning still showing a feeble cyclonic movement around the Gulf of Genoa, and blowing a fresh breeze to a moderate gale from South or South-South-East along our extreme western coasts. Light and anticyclonic generally, but strong in the south of Sweden. No important change during day, but force decreasing both in Ireland and Sweden.

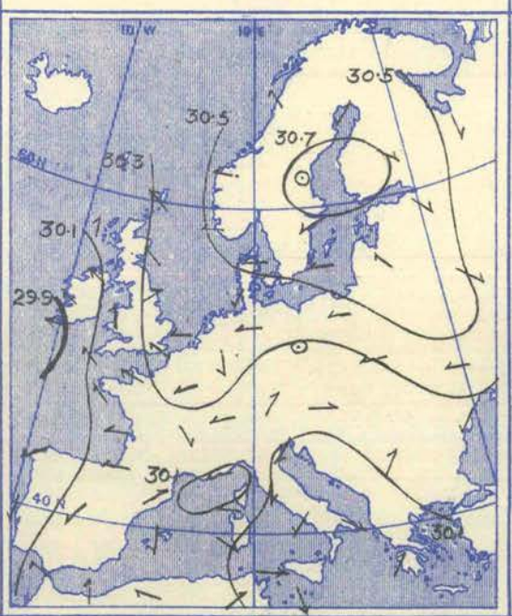
Barometer at 8 a.m. ranging from above 30·7 ins. in an anticyclone with its centre over Finland, and above 30·3 ins. in a secondary "high" over France and western Germany, to below 30·1 ins. in a small minima near Genoa, and to about 29·8 ins. in a large disturbance off our western coasts. Latter system travelling away northwards, and barometer rising slowly over the United Kingdom. No modification of the general distribution of pressure over our area.

Friday, 18th September, 1903.

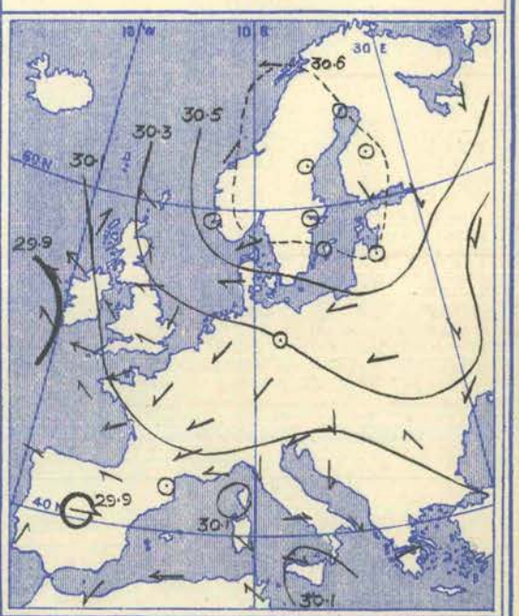
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright very generally, but dull in many parts of central Europe, with fog in places, and rain at Buda-Pesth; showery in the south-west of Ireland, and thunder reported at Bodö. Remaining fine all day in most regions, but slight rain falling in a few parts of our Islands, as much as 0·55" in. at Lésina, and 0·87 in., with thunder and lightning, at Vienna.

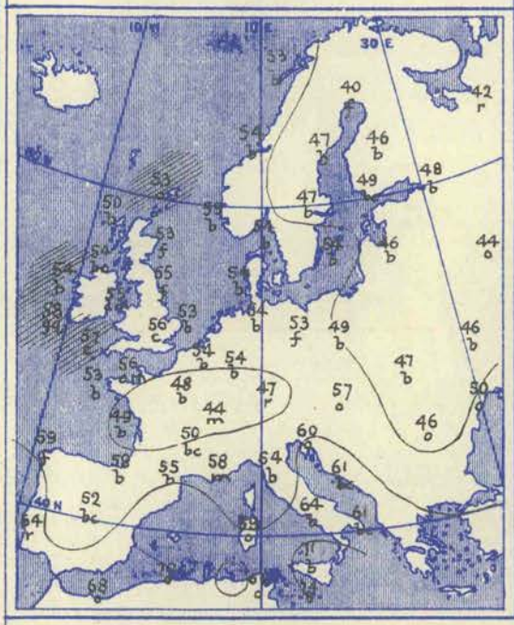
Temperature fallen in most regions, but risen over our Islands. Morning readings, highest, 75° at Alicante, 73° at Athens, and 68° at Barcelona and Palma. Lowest, (1) 37° at Haparanda, (2) 44° at Paris and Brussels, (3) 51° at Nottingham, and (4) 52° at Madrid. Rising during day to 68° in London and at Nairn, to 70° or above at most southern stations, and to above 80° in Greece and central Spain, as well as at Tunis and Aumale.

Wind at 8 a.m. light and irregularly cyclonic in most southern regions, and strong from South and South-East along our own western coasts. Light or moderate and anticyclonic over the major portion of our area. Very little modification during day.

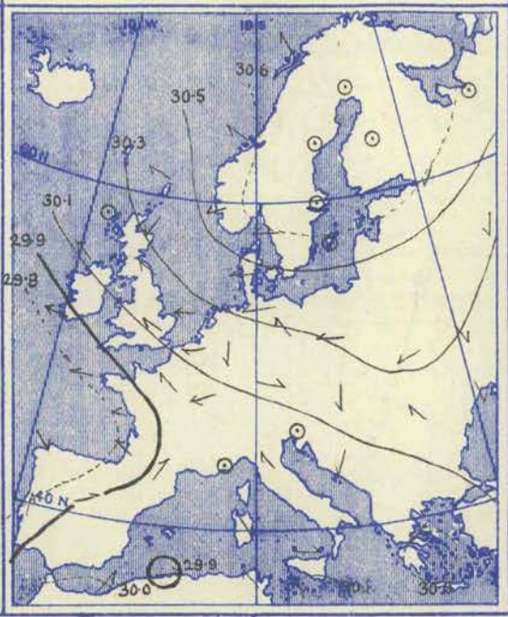
Barometer at 8 a.m. ranging from 30·6 ins. to above 30·7 ins. in a large area of high pressure over northern Europe, to below 30·1 ins. in some irregularly shaped and shallow depressions over the Mediterranean, and to below 29·8 ins. in a large system off our own western coasts. Scarcely any change taking place in the general distribution of the pressure later except over the Spanish Peninsula, where a decided fall of the mercury was shown by 6 p.m.

Saturday, 19th September, 1903.

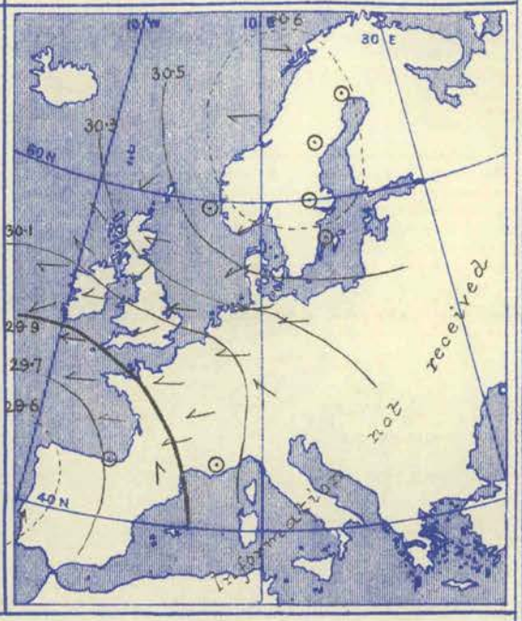
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine as a whole, but cloudy or dull at our western and south-western stations, in the Spanish Peninsula and Algeria. Rain falling at Archangel, Munich, Turin, Oran, and Lisbon, and fog prevailing at Corunna and on the north-east coast of Great Britain. Continuing very fine all day over the major portion of north-western Europe, but heavy rain—1·22 ins.—falling at Lisbon.

Temperature changed irregularly. Morning readings ranging from 73° at La Calle, and about 70° at a few other southern stations, to below 60° over Europe as a whole, and to below 50° in many inland and northern localities. Lowest values of all, 40° at Haparanda, 42° at Archangel, and 44° at Moscow and Belfort. Rising later to 66° at Nairn, 68° in London, 70° at Skudesnaes, 73° at Rochefort, and to 82° at Biarritz and Perpignan. Maxima on our north-east coasts only 55°.

Wind at 8 a.m. moderate from the Southward over Portugal, and fresh or strong from the South-Eastward or Eastward over all our southern and western districts. Light and anticyclonic over Europe as a whole. Very little change during day, but wind increasing to a strong breeze from South-South-West at Lisbon.

Barometer in morning highest, 30·5 ins. to above 30·6 ins. and above in a large anticyclone embracing the major portion of northern Europe. Lowest, 29·8 ins., in a depression over the Bay of Biscay and the north of Spain. Anticyclone maintaining its position with very little modification later, but a rather decided fall of the barometer taking place in Portugal, and a gentle fall over France and our own southern districts.

IV.—GENERAL NOTES, etc.

The general character of the weather during this week was anticyclonic and dry over our Islands and northern Europe, and cyclonic, with occasional heavy rain over the central countries and the north of Italy. The anticyclone arrived from the Atlantic soon after the beginning of the week, and at first stretched as a long band from Spain to Scandinavia, but later its central portion became located over Scandinavia and Finland, while depressions moved northwards some distance to the westward of Ireland and others appeared over Spain and the Bay of Biscay. The disturbance, over the central countries and the Mediterranean, which were most important during the earlier days of the period, were accompanied by heavy and persistent rains and sometimes by strong winds. During the latter part of the time the winds in our Islands were South-Easterly or Easterly and blew with considerable strength over the southern half of the Kingdom. Temperature was a good deal lower than of late over all the southern countries and assumed generally a decided autumnal distribution. Quite at the end of the week, however, there was a marked tendency to rise over the United Kingdom, although the readings remained rather low on the Continent and a strong or fresh Easterly current of wind prevailed.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 218.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	40·2	+15·5	46	+ 18
STRATHPEFFER SPA	54·7	+27·7	62	+ 32
EDINBURGH	31·5	+ 7·7	36	+ 9
COCKLE PARK	40·8	—	47	—
NEWCASTLE-ON-TYNE	31·8	—	37	—
YORK				
CROMER	34·9	—	40	—
LOWESTOFT	37·3	—	43	—
DUNMOW	41·0	—	47	—
SHEFFIELD	33·5	—	39	—
WORKSOP	42·6	+15·6	49	+ 18
THURCASTON	43·8	+14·8	50	+ 17
TUNBRIDGE WELLS	41·7	—	48	—
MARGATE	41·2	+ 6·9	47	+ 8
BROADSTAIRS				
RAMSGATE	—	—	—	—
EASTBOURNE	50·6	+11·5	58	+ 13
BRIGHTON	44·6	+ 6·1	51	+ 7
WORTHING	49·1		56	—
BOGNOR	44·4†	—	51†	—
WATERGATE PARK	41·9	—	48	—
WESTBOURNE	51·4†	+13·6	59†	+ 16
VENTNOR HOSPITAL	48·3	+ 8·0	55	+ 9
BOURNEMOUTH	—	—	—	—
MARLBOROUGH				
SOUTHPORT	51·0	—	59	—
RHYL	55·3	—	64	—
ABERDOVEY	55·3†	—	64†	—
TENBY	57·2	+21·9	66	+ 25
TORQUAY	56·3	+19·3	65	+ 22
NEWQUAY	55·4	+19·7	64	+ 23
GUERNSEY	47·2†	+ 6·5	54†	+ 7

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA :—The values below must be substituted for those which have already appeared.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX. - No. 33 - p. 194	Llandudno	—	—	—	—	—	—	—	—	—	—	—	48·4	+12·2	48	+ 12
„ - „ 34 - p. 200	Sumburgh Head	—	—	—	—	—	—	—	—	—	0·79	+ 0·02	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 38.] *Third Series.* WEEK ENDING SATURDAY, SEPTEMBER 26TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 224.)	Observed during the Week. Highest.	Lowest	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	72	34	63·1	48·8	55·6	5 above	95	+39	0	− 4	1613	−116	491	− 56
	1. SCOTLAND, EAST	68	40	61·2	49·8	55·2	4 above	92	+29	0	− 4	1843	−217	509	− 81
	2. ENGLAND, N.E.	70	44	61·4	52·3	56·6	4 above	102	+29	0	− 2	2166	− 68	342	−140
	3. ENGLAND, EAST	72	45	64·7	54·2	59·2	4 above	120	+35	0	− 2	2575	− 17	322	−206
	4. MIDLAND COUNTIES	72	42	65·9	52·9	59·1	6 above	120	+44	0	− 3	2395	−170	361	−178
	5. ENGLAND, SOUTH	71	49	65·9	55·2	60·3	5 above	128	+34	0	− 1	2710	−109	208	−181
Principal Grazing Districts.	6. SCOTLAND, WEST	79	46	63·4	51·9	57·4	5 above	108	+39	0	− 2	2087	− 90	324	− 92
	7. ENGLAND, N.W.	71	42	65·1	53·4	59·0	5 above	119	+41	0	− 1	2318	− 67	262	−128
	8. ENGLAND, S.W.	75	47	65·9	55·2	60·3	5 above	128	+42	0	− 1	2622	− 6	162	−139
	9. IRELAND, NORTH	67	46	62·9	53·6	58·1	5 above	113	+43	0	− 2	2149	−153	286	− 64
	10. IRELAND, SOUTH	69	49	63·5	55·1	59·1	5 above	120	+41	0	− 1	2566*	− 35	183	− 68
	— CHANNEL ISLANDS	72	51	65·1	55·7	60·2	2 above	127	+19	0	0	3019	+ 19	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 224.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	2	10 less	186	+27	48·3	+15·4	35	+12	41	+15	915	− 56	25	− 2
	1. SCOTLAND, EAST	3	3	4 less	163	+25	28·5	+ 6·8	22	− 3	26	− 4	1024	− 87	29	− 2
	2. ENGLAND, N.E.	3	3	2 less	136	+ 9	20·3	+ 2·9	25	− 2	29	− 3	1104	− 68	31	− 2
	3. ENGLAND, EAST	4	3	2 less	121	− 6	21·6	+ 4·8	30	− 4	36	− 4	1268	− 79	36	− 2
	4. MIDLAND COUNTIES	4	5	1 less	132	+ 9	24·6	+ 5·2	26	− 1	31	− 1	1096	− 68	31	− 2
	5. ENGLAND, SOUTH	4	4	3 less	135	+16	24·1	+ 5·2	31	− 2	37	− 3	1344*	− 16	38	0
Principal Grazing Districts.	6. SCOTLAND, WEST	4	6	5 less	168	+24	45·7	+12·1	24	− 3	28	− 4	1137	− 25	32	− 1
	7. ENGLAND, N.W.	4	4	5 less	156	+21	29·7	+ 6·3	26	+ 1	31	+ 1	1218	+ 68	34	+ 2
	8. ENGLAND, S.W.	5	9	0 (average)	150	+14	32·3	+ 6·4	26	− 8	31	−10	1303	− 92	37	− 3
	9. IRELAND, NORTH	3	3	5 less	188	+25	33·7	+ 8·7	25	+ 1	30	+ 1	994	− 72	28	− 2
	10. IRELAND, SOUTH	5	8	0 (average)	170	+24	35·2	+ 7·5	28	− 2	34	− 2	1110	−103	31	− 3
	— CHANNEL ISLANDS	5	7	1 less	161	+23	24·7	+ 3·7	31	− 7	37	− 9	1539	− 81	44	− 2

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was warm generally, with a very close and humid atmosphere. Much fog prevailed all along the south and east coasts of Great Britain, especially about the middle of the period. Very little rain fell until the latter half of the time, when considerable or heavy falls were experienced in many districts, in some cases being accompanied by thunder and lightning.

Temperature was above the mean, the excess ranging from 2° in the Channel Islands to 5° in most other districts, and to 6° in the Midland Counties. The highest of the maxima were recorded on rather irregular dates, and ranged from 75° in England S.W. and 72° in Scotland N., England E., the Midland Counties, and the Channel Islands to 67° in Ireland N. The lowest of the minima, which were mostly registered towards the end of the week, varied from 34° in Scotland N. to 49° in England S. and Ireland S., and to 51° in the Channel Islands.

Rainfall was less than the mean in all districts, except England S.W. and Ireland S., where that value was just equalled. During a severe thunderstorm at Cheadle on the night of Thursday as much as 1·77 ins. was collected in the gauge.

Bright Sunshine was deficient over the Kingdom as a whole, but slightly in excess of the mean in England N.W. and Ireland N. and considerably so in Scotland N. The percentages of the possible duration ranged from 41 in the last mentioned district, 37 in England S. and the Channel Islands, and 36 in England E. to 26 in Scotland E.

Barometer and Wind. At the commencement of the week an anticyclone lay over Scandinavia, and a depression over the Bay of Biscay and Spain, and the resulting South-Easterly to Easterly winds over our Islands blew strongly, or with a force of a moderate gale in many places. Later on the anticyclone extended and gradually moved southwards, while depressions moved northwards with their centres some distance to the westward of Ireland. The winds thus became more Southerly in direction for a time, but by Friday the arrival of a secondary depression over England from the southward produced a feeble cyclonic movement. On Saturday this system could be seen over the North Sea, but a decided fall of the mercury in the west of Ireland drew the winds to the Southward even on our eastern coasts.

307 | 70 219 | 90 Wy.& S. Ltd. 12 | 02

II.—DATA from which the SUMMARY on page 223 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.	*	*	*	*
0. SCOTLAND, N.	Sumburgh Head	60	47	55·3	49·3	52·2	+ 2·9	71	0	3	0·05	− 0·80	*	*	*	*
	Stornoway	67	44	64·1	49·0	56·2	+ 6·4	99	0	4	0·21	− 0·81	43·6	+ 19·9	52	+ 24
	Wick	64	40	59·1	49·3	54·0	+ 3·6	84	0	4	0·20	− 0·46	*	*	*	*
	Lairg Ⓢ	72	34	66·3	46·5	55·9	+ 6·9	97	0	2	0·04	− 0·72	*	*	*	*
	Glencarron Ⓢ	70	41	67·0	48·5	57·3	+ 7·6	107	0	1	0·09	− 1·77	*	*	*	*
	Fort Augustus Ⓢ	69	38	65·1	47·3	55·8	+ 4·6	97	0	1	0·15	− 0·80	25·2	+ 7·8	30	+ 9
	Fort William	68	43	65·0	51·8	58·1	+ 6·1	113	0	4	0·45	− 1·27	27·9	+ 6·8	33	+ 8
1. SCOTLAND, E.	Nairn	68	40	64·1	47·7	55·5	+ 4·2	95	0	5	0·14	− 0·43	*	*	*	*
	Aberdeen	62	45	57·1	50·1	53·4	+ 1·9	80	0	3	0·03	− 0·64	26·6	− 0·6	32	− 1
	Braemar Ⓢ	66	44	61·9	47·4	54·3	+ 6·4	86	0	1	0·19	− 0·60	*	*	*	*
	Ochtertyre Ⓢ	67	50	61·1	52·0	56·3	+ 5·1	100	0	6	0·92	+ 0·09	*	*	*	*
	Leith Ⓢ	68	48	60·9	52·1	56·3	+ 3·2	100	0	4	0·17	− 0·30	*	*	*	*
	Marchmont Ⓢ	66	45	62·0	49·7	55·6	+ 5·0	95	0	1	0·06	− 0·67	20·8	− 3·7	25	− 5
2. ENGLAND, N.E.	Alnwick Castle	65	49	60·4	51·1	55·5	+ 3·8	95	0	3	0·03	− 0·62	*	*	*	*
	Durham	66	49	60·3	52·7	56·3	+ 4·0	100	0	2	0·13	− 0·42	16·9	− 8·6	20	− 10
	Shields	65	52	60·3	52·6	56·3	+ 3·7	100	0	1	0·01	− 0·51	*	*	*	*
	Scarborough Ⓜ	63	44	60·3	51·0	55·4	+ 1·9	94	0	4	0·12	− 0·49	25·7	—	31	—
	Spurn Head	64	53	61·0	53·4	57·0	+ 2·2	105	0	3	0·41	− 0·04	*	*	*	*
	Fulbeck (Lincolnshire)	70	49	66·1	53·1	59·3	+ 5·4	121	0	2	1·14	+ 0·65	27·6	—	33	—
3. ENGLAND, E.	Hillington Ⓜ	70	48	66·1	53·3	59·4	+ 5·3	122	0	5	0·65	+ 0·04	33·6	+ 4·4	40	+ 5
	Yarmouth	65	51	62·9	53·4	57·9	+ 2·8	111	0	4	0·20	− 0·43	*	*	*	*
	Geldeston	70	52	65·7	54·9	60·0	+ 4·8	126	0	4	0·15	− 0·41	33·8	+ 0·1	40	0
	Cambridge	72	46	67·7	52·6	59·8	+ 4·8	125	0	3	0·51	+ 0·03	23·7	− 8·3	28	− 10
	Felixstowe	65	50	62·5	55·9	59·0	+ 4·4	119	0	2	0·12	—	46·4†	—	55†	—
	Rothamsted	66	45	63·6	53·8	58·5	+ 5·0	116	0	6	0·43	− 0·19	20·4	− 10·4	24	− 12
	Shoeburyness	67	51	64·3	55·6	59·7	+ 3·6	124	0	4	0·22	− 0·26	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	69	48	63·5	51·9	57·4	+ 5·3	108	0	4	0·61	− 0·08	27·0	—	32	—
	Bawtry (Hesley Hall)	71	45	65·4	52·1	58·4	+ 4·7	115	0	3	0·33	− 0·21	*	*	*	*
	Nottingham	69	46	66·7	53·0	59·5	+ 5·4	123	0	4	0·31	− 0·26	29·9	—	36	—
	Loughborough	72	44	68·7	53·9	60·9	+ 6·7	132	0	3	0·17	− 0·39	*	*	*	*
	Colly Weston (Stamford)	70	47	66·0	52·0	58·7	+ 4·4	117	0	3	0·26	− 0·31	*	*	*	*
	Cheadle Ⓜ	67	43	63·8	52·3	57·8	+ 5·6	111	0	4	2·17	+ 1·44	*	*	*	*
	Birmingham (Edgbaston)	68	48	65·0	54·1	59·3	+ 5·7	121	0	3	0·46	− 0·14	19·6	—	23	—
	Hereford Ⓜ	71	42	66·7	52·8	59·4	+ 5·4	122	0	4	0·28	− 0·33	*	*	*	*
	Cirencester	70	45	66·1	52·7	59·1	+ 5·9	120	0	4	0·35	− 0·32	26·8	− 2·9	32	− 4
	Oxford	70	47	66·7	54·4	60·3	+ 5·9	128	0	3	0·20	− 0·37	25·0	− 6·4	30	− 8
5. ENGLAND, S.	London	69	52	67·6	54·4	60·7	+ 4·7	131	0	2	0·10	− 0·44	21·8‡	− 5·0‡	26‡	− 6‡
	Swarraton (Alresford) Ⓜ	71	52	67·9	54·3	60·8	+ 7·4	132	0	3	0·28	− 0·42	*	*	*	*
	Dungeness	67	49	64·4	56·1	60·1	+ 3·4	127	0	5	0·40	− 0·24	28·7	..	34	—
	Hastings (St. Leonards)	69	51	64·7	55·1	59·7	+ 2·9	124	0	3	0·17	− 0·51	26·9	− 9·9	32	− 12
	Southampton	71	50	68·2	55·7	61·7	+ 5·5	138	0	3	0·55	− 0·13	35·4	+ 1·1	42	+ 1
	Portland Bill	64	54	62·6	56·7	59·5	+ 2·9	123	0	5	0·75	—	*	*	*	*
	Shaftesbury Ⓜ	68	52	66·0	53·9	59·7	+ 5·6	124	0	4	0·55	− 0·25	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	67	46	65·0	51·5	57·9	+ 5·7	111	0	3	0·37	− 1·30	*	*	*	*
	Glasgow	64	48	61·1	51·9	56·3	+ 4·9	100	0	3	0·79	− 0·07	18·4	− 2·5	22	− 3
	Cally Ⓢ	68	48	63·9	50·2	56·7	+ 5·2	103	0	5	0·72	− 0·32	*	*	*	*
	Aspatria	70	50	65·0	52·5	58·5	+ 5·9	116	0	2	0·08	—	25·9	—	31	—
	Douglas (Isle of Man)	65	48	61·8	53·3	57·4	+ 4·8	108	0	5	1·18	+ 0·30	26·7	− 4·0	32	− 5
7. ENGLAND, N.W.	Newton Rigg	66	42	62·4	49·8	55·8	+ 4·2	97	0	2	0·22	—	22·4	—	27	—
	Stonyhurst	68	49	63·3	53·6	58·2	+ 5·6	113	0	5	0·16	− 0·99	25·9	− 0·8	31	− 1
	Blackpool Ⓜ	71	46	66·0	53·8	59·6	+ 5·6	123	0	4	0·23	− 0·63	27·6	+ 1·2	33	+ 2
	Manchester (Prestwich)	70	48	66·6	53·1	59·5	+ 6·4	123	0	4	0·75	− 0·15	21·8	—	26	—
	Liverpool Obsy. (Bidston)	68	47	64·6	54·7	59·4	+ 4·9	122	0	4	0·28	− 0·47	23·2	—	28	—
	Chester (Hawarden Bridge)	70	44	66·2	53·1	59·3	+ 4·2	121	0	3	0·55	—	*	*	*	*
	Llandudno Ⓜ	69	51	66·9	54·6	60·5	+ 5·1	130	0	3	0·47	− 0·27	27·5	+ 1·1	33	+ 1
	Holyhead	70	54	65·1	54·7	59·7	+ 4·6	124	0	4	0·48	− 0·28	*	*	*	*
8. ENGLAND, S.W.	Llandovery	75	48	70·7	57·0	63·5	+10·2	151	0	4	0·69	− 0·38	*	*	*	*
	Pembroke	64	53	62·1	55·7	58·8	+ 3·1	118	0	6	0·67	− 0·12	29·5	− 2·2	35	− 3
	Clifton	72	51	67·6	56·1	61·6	+ 6·8	137	0	3	0·43	− 0·36	*	*	*	*
	Bath	72	48	68·7	55·1	61·6	+ 6·2	137	0	3	0·11	− 0·59	30·9	—	37	—
	Arlington (N. Devon)	66	48	64·9	54·1	59·2	+ 5·1	120	0	6	0·59	− 0·58	*	*	*	*
	Cullompton Ⓜ	69	47	67·1	52·9	59·7	+ 4·8	124	0	4	1·59	+ 0·83	19·3	− 11·7	23	− 14
	Falmouth	64	54	62·2	56·0	59·0	+ 3·0	119	0	6	1·49	+ 0·49	22·9	− 11·8	27	− 14
	Plymouth	67	51	64·2	54·8	59·3	+ 3·5	121	0	5	1·54	+ 0·74	22·1	− 11·2	26	− 13
9. IRELAND, N.	Malin Head	65	49	61·6	53·1	57·2	+ 3·7	106	0	2	0·02	− 0·71	*	*	*	*
	Edenfel (Omagh)	65	46	64·4	51·7	57·8	+ 6·7	111	0	2	0·21	− 0·59	*	*	*	*
	Blacksod Point	65	54	62·7	56·0	59·2	+ 4·7	120	0	4	0·45	− 0·51	*	*	*	*
	Markree Castle	66	49	64·6	54·2	59·2	+ 7·1	120	0	5	0·33	− 0·57	21·2	− 2·6	25	− 3
	Armagh	67	48	64·2	53·1	58·4	+ 6·4	115	0	3	0·37	− 0·28	29·5	+ 3·9	35	+ 5
	Donaghadee	61	50	60·0	53·7	56·7	+ 3·5	103	0	3	0·27	− 0·38	*	*	*	*
10. IRELAND, S.	Dublin	67	50	64·2	54·1	58·9	+ 4·6	118	0	5	1·13	+ 0·60	37·3	+ 5·4	44	+ 6
	Birr Castle	67	49	64·4	53·4	58·6	+ 5·7	116	0	4	0·23	− 0·43	26·4	− 2·1	31	− 3
	Kilkenny	65	50	62·3	54·9	58·4	+ 4·9	115	0	5	0·62	− 0·01	*	*	*	*
	Waterford	64	52	62·9	55·0	58·8	+ 4·5	118	0	4	0·69	− 0·07	*	*	*	*
	Roche's Point	63	54	60·4	56·3	58·3	+ 3·1	114	0	6	0·79	− 0·07	*	*	*	*
	Valencia	69	55	63·9	56·7	60·1	+ 4·7	127	0	7	1·09	+ 0·04	20·6	− 8·9	25	− 11
	Killarney	69	54	64·6	56·5	60·4	+ 6·2	129	0	5	0·97	0·00	*	*	*	*
	Foynes	67	50	64·9	53·8	59·1	+ 5·1	120	0	5	0·69	− 0·04	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	53	61·9	55·6	58·6	+ 1·2	116	0	5	0·38	− 0·39	20·7	− 16·0	25	− 19
	Jersey	72	51	68·3	55·7	61·7	+ 2·5	138	0	4	0·98	+ 0·22	30·1	− 9·5	36	− 11

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

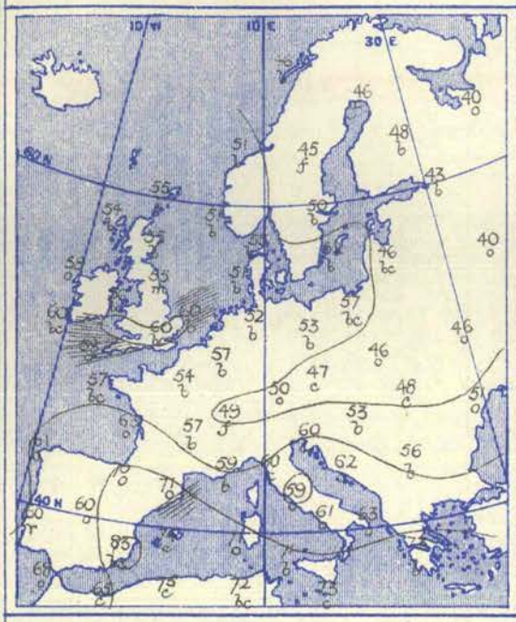
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

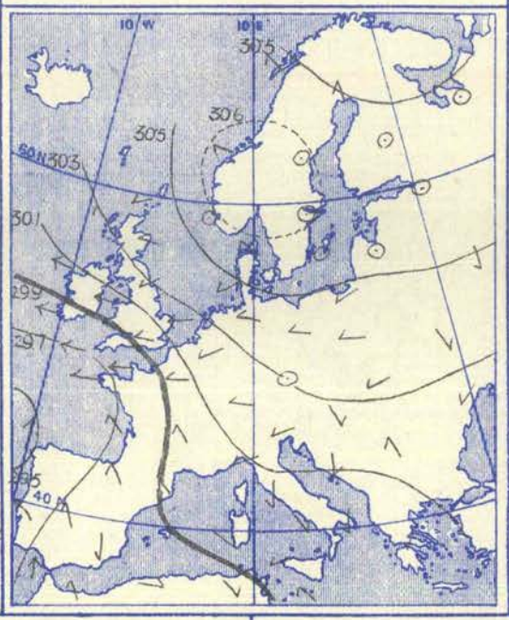
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 20th September, 1903.

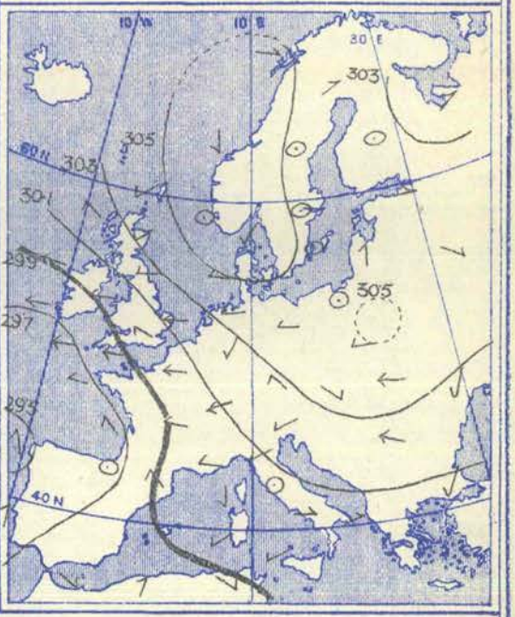
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine as a whole, but cloudy at some Irish stations and in Spain and Portugal, with rain at Lisbon. Rain also falling at Turin. Continuing fine and dry generally, but considerable rain occurring in the west of France and at Scilly and slight amounts in Italy. A thunderstorm experienced at Pembroke.

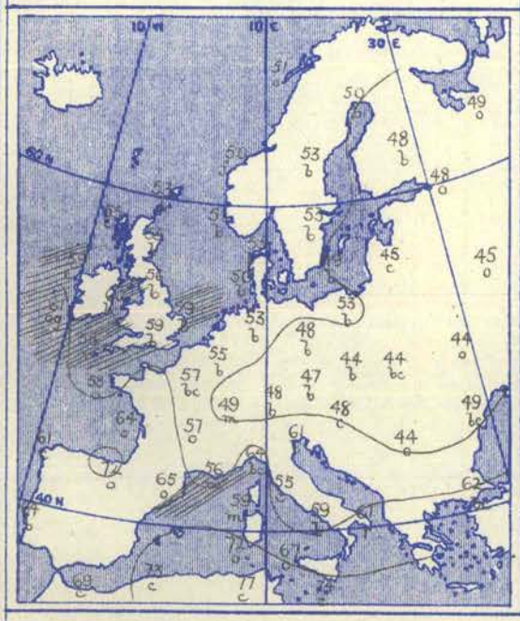
Temperature risen in the south and over the United Kingdom, fallen or changed irregularly elsewhere. Morning readings ranging from 83° at Alicante, 75° at Algiers, and 73° at Malta and Patras, to 60° at some English and Irish stations, to below 50° in most parts of central Europe and Scandinavia, and to 40° at Archangel. Maxima during day, 69° at Valencia Island and in London, 72° at Jersey and Frankfurt, some degrees higher in Italy and the south of France, and above 80° at Tunis; maxima as high as 66° at Stockholm and 63° at Hernösand.

Wind at 8 a.m. fresh or strong from the South-Eastward in the Spanish Peninsula and from East over the United Kingdom, but calms or light cyclonic airs prevailing in all the northern parts of the Continent. Scarcely any change taking place during day.

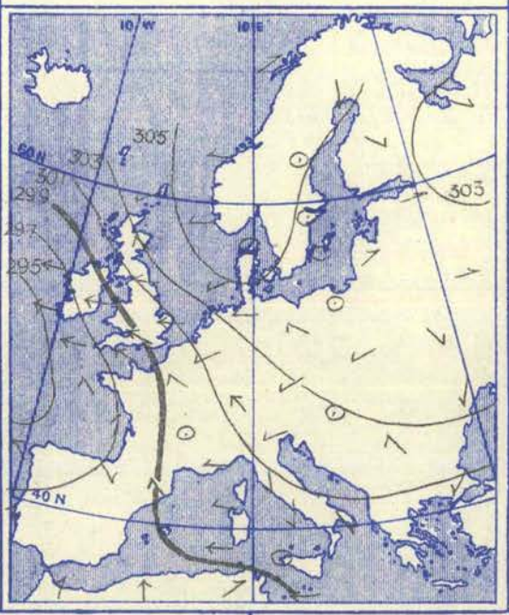
Barometer in morning highest, above 30·6 ins., in a very extensive anticyclone with its centre over Scandinavia, and extending eastwards to Siberia. Lowest, 29·5 ins. and less, in a depression off the north-west coast of Spain. Gradients rather steep over our Islands and their neighbourhood; moderate or very slight as a whole. No change of importance occurring in the general distribution of pressure during day, but anticyclone giving way somewhat and depression expanding northwards towards Ireland.

Monday, 21st September, 1903.

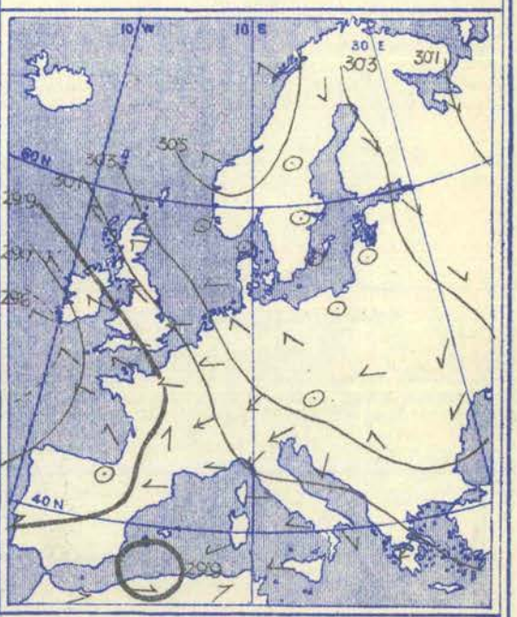
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair as a whole, but overcast at some of our own western stations and in the major portion of France, with rain at Roche's Point, Scilly, and Lorient. Rain later at most of our western and southern stations and in various parts of France, as much as 0·5 in. at Portland Bill and 2·4 ins., accompanied by a thunderstorm, at Perpignan.

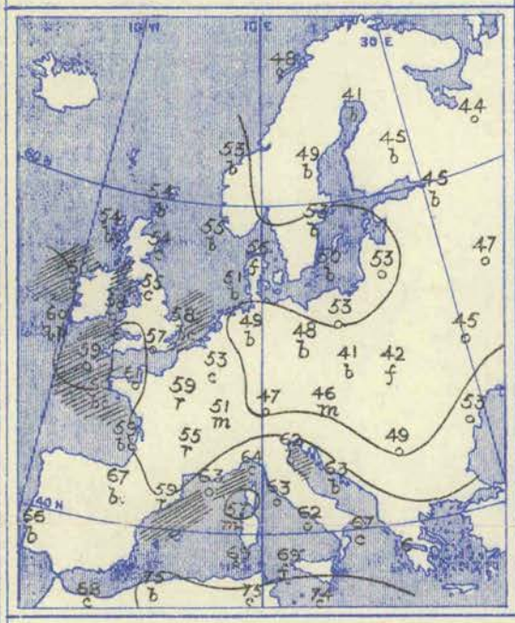
Temperature changed little and irregularly. Readings at 8 a.m. ranging from 77° at La Calle and 74° at Malta to a little above or slightly below 60° over England and Ireland and to 50° and below over the major portion of the Continent. Lowest reading of all 43° at Breslau and Warsaw. Rising during day to 69° in London and at Nottingham, 71° at Manchester and at Brussels, to above 75° at some French and Italian stations, to 82° at Palermo, 86° at Tunis, and to 93° at La Calle.

Wind still blowing freshly or strongly from the Eastward on most of our own coasts and from the Southward in the Iberian Peninsula, and showing a light anticyclonic circulation over all the northern parts of the Continent. No great change later, but increasing to a moderate gale from East on the coast of Norfolk, and to a strong breeze along the east coast of England as a whole.

Barometer at 8 a.m. ranging from 30·5 ins. and upwards in a very large anticyclone embracing the whole of Scandinavia and extending away to the northward, to 29·74 ins. at Archangel and to less than 29·5 ins. in a depression to the southward of Ireland. Very little alteration in the disposition of pressure as a whole during day, but a baric fall in Sweden, Finland, and the north of Russia causing the anticyclone to become more restricted in size.

Tuesday, 22nd September, 1903.

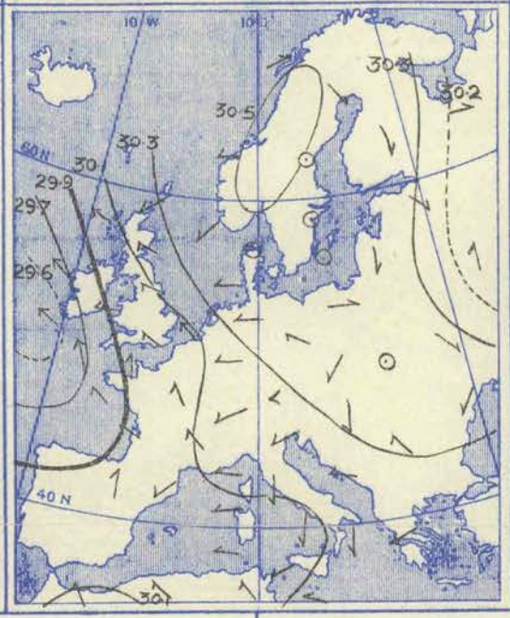
Temperature and Weather. 8 a.m.

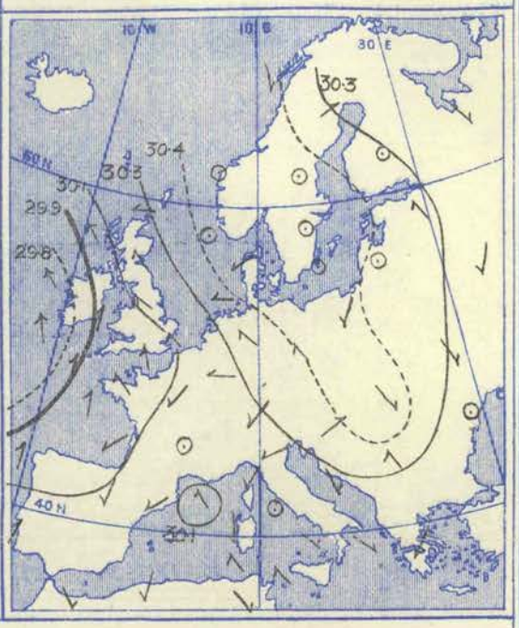


Weather in morning fine and bright as a whole, but dull at some Russian and Italian stations, in many parts of France, and on our own south and west coasts. Rainy at Perpignan, Lyons, Paris, and Dungeness, and showery at Holyhead and Valencia Island. Slight rain later in several parts of the United Kingdom, 0·35 in. at Palermo, and heavy falls in the extreme south of France—one inch at Cape Béarn, and 1·3 ins. at Cette.

Temperature risen at most southern stations, fallen in the north. Morning readings ranging from 75° at Algiers and Tunis, and 74° at Malta, to 67° at Biarritz, 60° in the west of Ireland, 55° at Skudesnaes, to below 50° in most parts of central and northern Europe, and to 41° at Cracow. Maxima during day 71° at Bath, 74° at Aberystwyth, a little less or above 80° over southern Europe. Maximum at Paris 64°, in London 63°, and at Lyons 62°, but as high as 66° at Stockholm.

Barometer and Wind. 8 a.m. and 6 p.m.



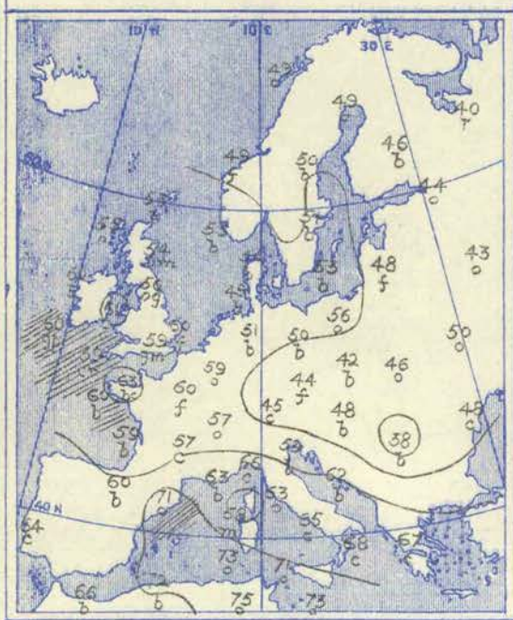


Wind at 8 a.m. light and anticyclonic over all the more northern parts of the Continent, but fresh from South in Portugal, and fresh or strong from the South-Eastward over the United Kingdom. Irregularly cyclonic over the western part of the Mediterranean. No important change later.

Barometer fallen except in south. Readings at 8 a.m. highest, 30·3 ins. to 30·5 ins. in a large anticyclone covering the whole of Scandinavia and a good part of Germany and Poland. Lowest, 29·6 ins. and less in a depression off the south-west of Ireland. Little change later in the general distribution, but anticyclone extending south-eastwards to Transylvania, and depression off Ireland moving away northwards. Barometer rising rather decidedly in the west of France and on our south-west coasts.

Wednesday, 23rd September, 1903.

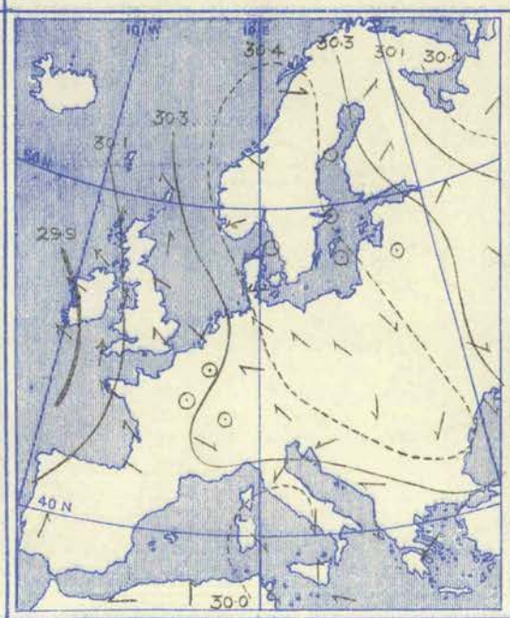
Temperature and Weather. 8 a.m.

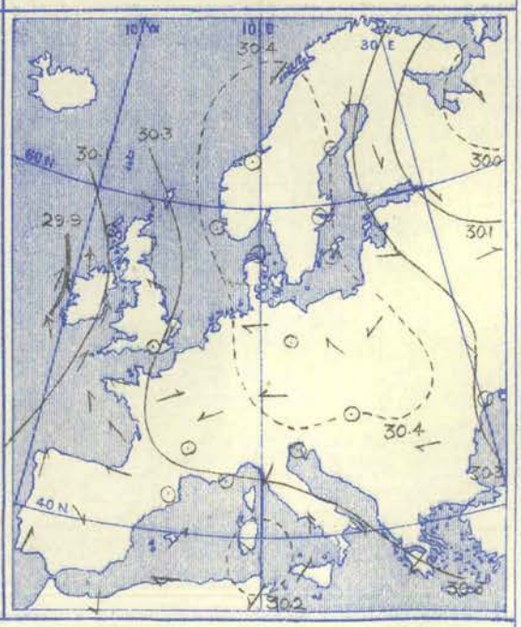


Weather at 8 a.m. fine and bright in most parts of the Continent, but cloudy or dull at some Russian stations, and rainy at Archangel. Cloudy or overcast over the United Kingdom, with much fog or mist in the east and south, slight rain at Oxford and Scilly, and passing showers at Valencia. Generally dry later over the Continent, but some rain falling in most parts of these Islands; amounts slight as a rule, but as much as 0·6 in. at Valencia. Slight measurements deposited in the gauges by the wet fogs or dews at several English stations.

Temperature still high for the time of year in our Islands. Morning readings ranging from 75° at La Calle, 73° at Cagliari and Malta, and 71° at Barcelona, to 67° at Patras, and 66° at Oporto, 61° at Holyhead, 60° in the west of Ireland, 53° at Wick, and to below 50° over the greater part of the Continent. Lowest values, 40° at Archangel and 38° at Hernösand. Rising during day to 70° at Oxford, 72° at Bath and Jersey, 70° at Hernösand, to between 70° and 80° in the extreme south, and to a little above 80° in a few places.

Barometer and Wind. 8 a.m. and 6 p.m.



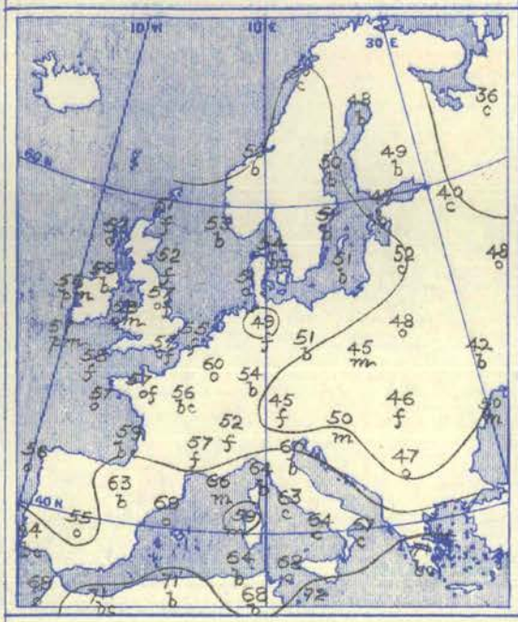


Wind at 8 a.m. showing a very extensive anticyclonic circulation on the Continent, but drawing into South-East and blowing freshly or strongly on our own western coasts. Very little change later as a whole, but some veering towards South taking place in Ireland and Wales.

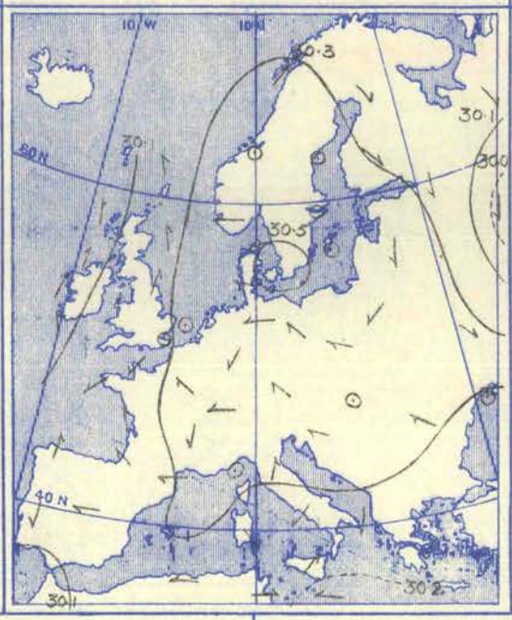
Barometer risen in all parts of our area except the north-east and south-east. Morning readings ranging from 30·4 ins. in a very large anticyclone extending from beyond the Arctic circle across Scandinavia to Germany and the northern part of the Balkan Peninsula, to 30·0 ins. and less over the White Sea, and to below 29·9 ins. off the west of Ireland. Scarcely any change in the relative distribution of pressure or in the actual height of the mercury later.

Thursday, 24th September, 1903.

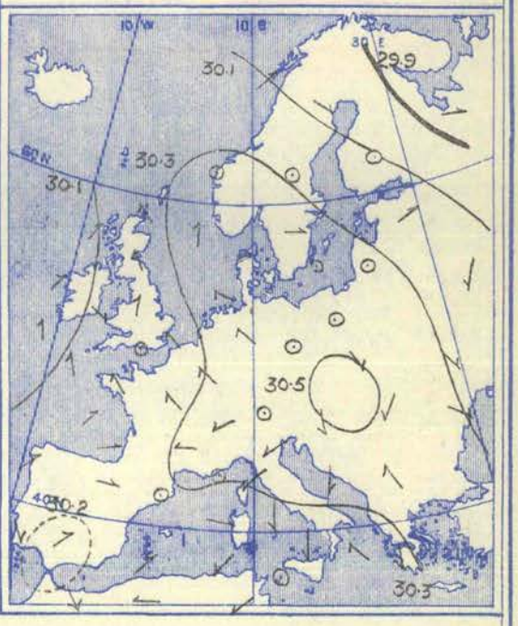
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over our area as a whole, but dull throughout the United Kingdom, with showers in the west of Ireland, rain in the north of Scotland, and fog along the entire length of our south and east coasts from the Scilly Isles to the Shetlands. Fog also prevailing at Cuxhaven and at some stations in central Europe. Fog continuing all day in most places. Rain falling over Brittany and in most parts of our Islands, and thunderstorms occurring at Biarritz, Oxford, and Nottingham.

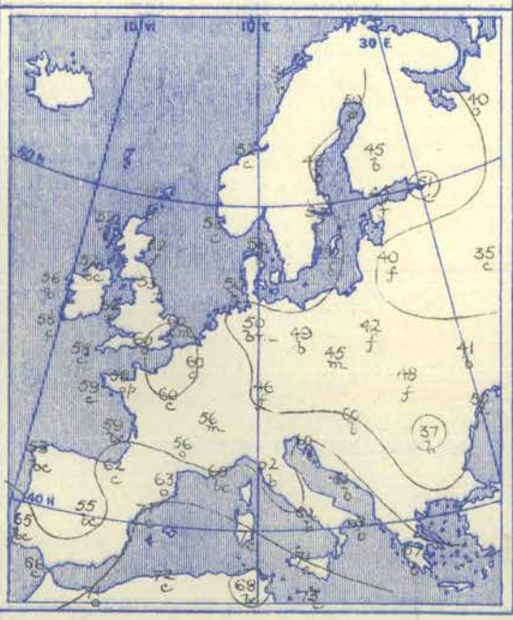
Temperature in morning ranging from 79° at Alicante and 72° at Tunis and Malta to 62° at Dungeness, 52° at Aberdeen, and to below 50° over most central and northern regions. Lowest readings, 46° at St. Petersburg and 36° at Archangel. Rising later to 66° in Sweden, 69° over central England, above 70° over southern Europe generally, to 82° at San Fernando, and 84° at Pesaro.

Wind continuing light and anticyclonic over the major portion of our area, but moderate from the Southward (cyclonic) along our own west coasts and a partial cyclonic circulation shown over the west of France. Very little change later.

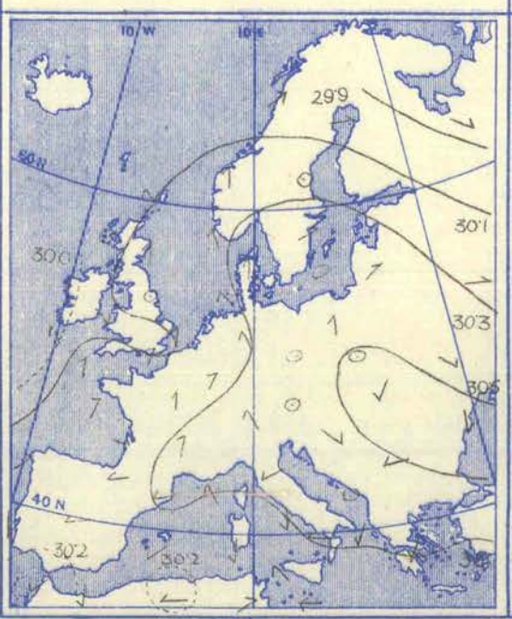
Barometer continuing highest, 30·4 ins. to 30·5 ins., in a large anticyclone covering the greater part of central Europe and Scandinavia; lowest, about 30·0 ins. or less, (1) off our own north-west coasts, and (2) over central Russia. Relatively low in a shallow disturbance over the Bay of Biscay. Pressure giving way decidedly later over the north of Scandinavia, and a steady baric fall taking place over the north of France and the south of our Islands.

Friday, 25th September, 1903.

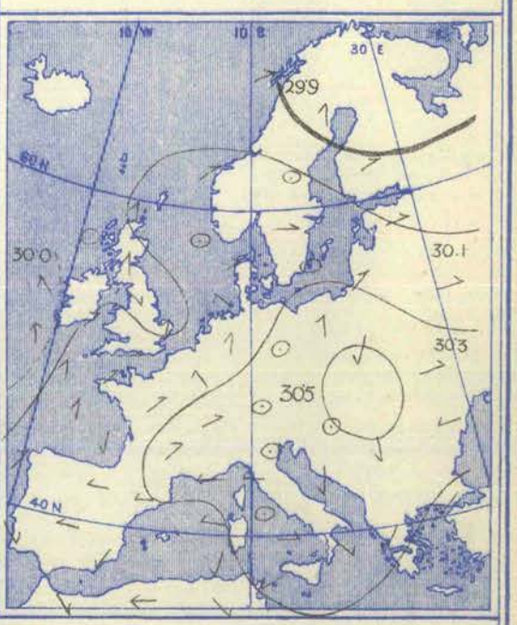
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine or fair in many parts of the Continent, but foggy or misty at some Austrian and German stations. Cloudy or dull in most British localities, with fog still prevailing along the east and north-east coasts and rain falling over central England. Considerable amounts of rain falling later in the Netherlands, north Germany, and on the Norwegian coasts, and also at Yarmouth and Cagliari.

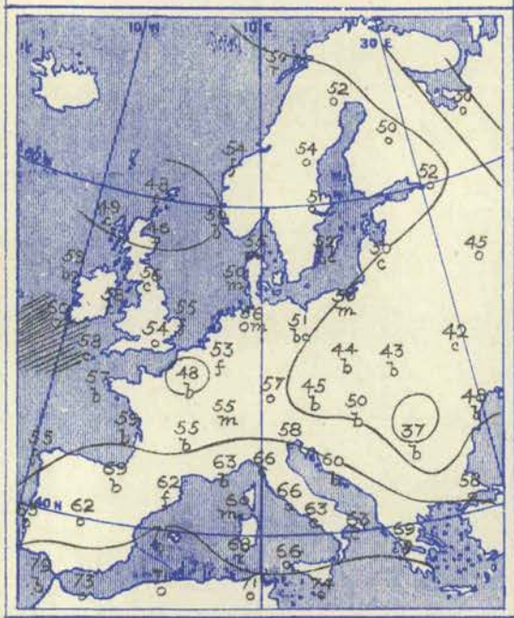
Temperature fallen as a whole, but risen in a few places. Morning readings ranging from 70° or a little above at some stations in the extreme south to below 60° over our area as a whole, and to below 50° in most northern and central localities. Lowest readings of all, 37° at Hermanstadt and 35° at Moscow. Rising during day to 64° at Hernösand, 68° in London above 70° over France and southern Europe generally, and to 86° at Madrid.

Wind in morning continuing light and anticyclonic generally, but showing a feeble cyclonic movement over England, and moderate Southerly winds prevailing in the west of Ireland. Very little change taking place during day.

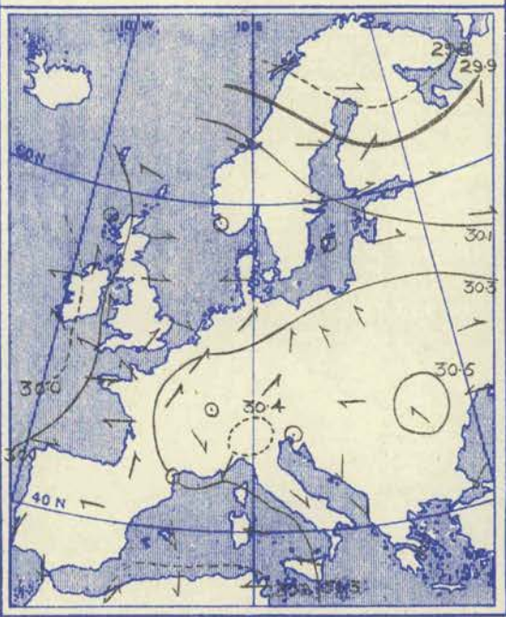
Barometer in morning ranging from 30·5 ins. and upwards in the central portion of a large anticyclone covering the major portion of the Continent to below 30·1 ins. in a small depression over England, to below 30·0 ins. off the west of Ireland, and to below 29·9 ins. over the White Sea. Scarcely any modification of the general distribution of pressure later. Depression over England moving slowly north-north-eastward.

Saturday, 26th September, 1903.

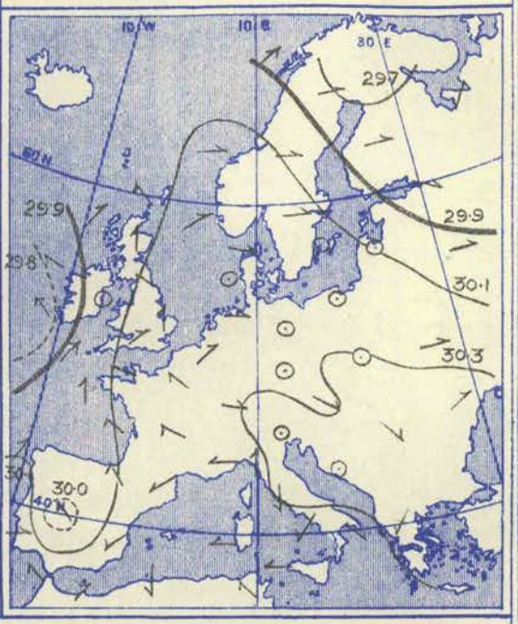
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull as a whole, but fine in most parts of south-eastern Europe; foggy at Corunna, on our own north-east and south-east coasts, over the Netherlands, and at some Norwegian stations, and rainy at Bodö and Cagliari. Rain falling later over the north-west of France, the major portion of our Islands, and on the west coast of Norway, and thunderstorms experienced at Portland Bill and Pembroke.

Temperature changed rather irregularly, but fallen in most places. Morning readings ranging from 79° at San Fernando, and a little above 70° at some other extreme southern stations, to below 50° over the major portion of the Continent, to 37° at Hermanstadt and Kharkov, and to 30° at Archangel. Rising during day to 68° at Leith, Bath, and in London, to 71° at Jersey, and to several degrees higher over southern Europe and in Algeria. Highest readings, 84° at Biarritz and San Fernando.

Wind light and anticyclonic over Europe as a whole, but mainly cyclonic over the United Kingdom and the North Sea, as well as in the extreme north of the Continent. A complete cyclonic circulation setting in later over the Iberian Peninsula, and Southerly winds increasing in force on our own western coasts.

Barometer fallen in most regions. Readings at 8 a.m. ranging from 30·3 ins. to above 30·5 ins. in a large anticyclone embracing most of the southern half of the Continent and having its centre over Transylvania, to below 30·0 ins. over and off the west of Ireland, and to below 29·8 ins. over Lapland. A well-marked depression forming over central Spain later, and another system approaching Ireland. Anticyclone decreasing steadily in height.

IV.—GENERAL NOTES, etc.

The distribution of barometric pressure during this week was of a very simple type. At first a large anticyclone with readings above 30·5 inches lay over Scandinavia and extended a considerable distance eastwards and south-eastwards, while the lowest pressure was in disturbances over Spain and the Bay of Biscay. The anticyclone held almost the same position for some days, while the primary depressions moved slowly northwards outside our western coasts and some of their secondaries south-eastwards to the south-west of France. During the end of the week the anticyclone gave way on its northern side owing to the eastward movement of depressions in the far north of Europe, and finally became located over the central countries. The barometer had at the same time risen over Spain and the Bay of Biscay, so that the disturbances over the Atlantic only affected our most western coasts. A light anticyclonic circulation of wind prevailed very generally over the greater part of the Continent, but over the extreme south-western countries and over the United Kingdom the wind was often strong in force from the Southward, South-Eastward, or Eastward under the influence of the Atlantic depressions. Very dry weather was experienced over Europe as a whole, but some heavy falls of rain were recorded during the earlier part of the period over France, and later on considerable amounts were measured in different parts of Norway and at some of our own stations. About the middle of the week thick fog was very prevalent along the east and south coasts of England and the east of Scotland. Temperature showed a downward tendency on the Continent, but over the United Kingdom it was generally many degrees above the normal; the atmosphere was, however, very close and humid. At the end of the period a change to a more southerly type of weather seemed to be in progress, and the anticyclone had become reduced in height.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning, and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines indicate rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from Observations made at 8 a.m. in the British Islands, Belgium, Holland and Spain; at 7 a.m. in Germany, Denmark, Norway, and Sweden; at 6.51 a.m. in France and Algeria; at 6 a.m. in Italy and Austria; at 5.25 a.m. in Greece; at 4.59 a.m. in Russia; and at 9.36 a.m. in Portugal (except at Lisbon, where the hour is 8.36 a.m.).

The Chart for 6 p.m. is prepared from Observations taken at 6 p.m. in the British Islands, Belgium and Spain; 4.0 p.m. in Portugal; 5.25 p.m. in Greece; 5.51 p.m. in France; 6.51 p.m. in Algeria; 6.59 p.m. in Russia; 7 p.m. in Germany, Holland, Denmark, Norway, and Sweden; and 8 p.m. in Austria and Italy. The time indicated in each case is Greenwich time.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 224.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	35·6	+12·1	42	+ 14
STRATHPEFFER SPA	41·0	+15·2	49	+ 18
EDINBURGH	17·8	- 4·6	21	- 6
COCKLE PARK	23·0	—	27	—
NEWCASTLE-ON-TYNE	11·1	—	13	—
YORK	?29·7	+ 4·1	?35	+ 5
CROMER	36·1	—	43	—
LOWESTOFT	38·7	—	46	—
DUNMOW	22·5	—	27	—
SHEFFIELD	23·5	—	28	—
WORKSOP	27·6	+ 2·3	33	+ 3
THURCASTON	29·6	+ 2·5	35	+ 3
TUNBRIDGE WELLS	29·9	—	36	—
MARGATE	35·8	+ 3·5	43	+ 4
BROADSTAIRS	39·0	—	46	—
RAMSGATE	—	—	—	—
EASTBOURNE	25·5	-11·1	30	- 13
BRIGHTON	38·2	+ 1·9	45	+ 2
WORTHING	35·9	—	43	—
BOGNOR	38·3†	—	46†	—
WATERGATE PARK	33·8	—	40	—
WESTBOURNE	47·3†	+12·1	56†	+ 14
VENTNOR HOSPITAL	36·7	- 0·9	44	- 1
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	26·3	- 2·1	31	- 3
SOUTHPORT	27·2	—	32	—
RHYL	35·9	—	43	—
ABERDOVEY	33·6†	—	40†	—
TENBY	28·2	- 4·7	34	- 6
TORQUAY	21·8	-12·7	26	- 15
NEWQUAY	29·8	- 3·7	36	- 4
GUERNSEY	41·2†	+ 3·8	49†	+ 5

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 39.] *Third Series.* WEEK ENDING SATURDAY, OCTOBER 3RD, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 230.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	69	41	59·5	48·8	53·9	5 above	83	+36	0	- 5	1696	- 80	491	- 61
	1. SCOTLAND, EAST	69	40	60·4	48·2	54·0	5 above	84	+31	0	- 6	1927	-136	509	- 87
	2. ENGLAND, N.E.	68	39	62·2	49·3	55·5	4 above	95	+35	0	- 3	2261	- 33	342	-143
	3. ENGLAND, EAST	72	46	65·6	53·0	59·0	6 above	119	+51	0	- 3	2694	+ 34	322	-209
	4. MIDLAND COUNTIES	69	43	64·0	50·4	56·9	5 above	104	+42	0	- 5	2499	-128	361	-183
	5. ENGLAND, SOUTH	70	48	64·7	54·9	59·6	6 above	123	+43	0	- 2	2833	- 66	208	-183
Principal Grazing Districts.	6. SCOTLAND, WEST	65	46	60·9	51·9	56·2	6 above	99	+39	0	- 3	2186	- 51	324	- 95
	7. ENGLAND, N.W.	67	44	61·7	51·3	56·3	4 above	100	+34	0	- 2	2418	- 33	262	-130
	8. ENGLAND, S.W.	68	45	62·8	54·5	58·5	5 above	116	+43	0	- 1	2738	+ 37	162	-140
	9. IRELAND, NORTH	64	49	60·2	52·2	56·0	5 above	98	+39	0	- 3	2247	-114	286	- 67
	10. IRELAND, SOUTH	65	48	61·5	52·9	57·0	4 above	105	+37	0	- 2	2671	+ 2	183	- 70
	— CHANNEL ISLANDS	69	54	64·3	56·2	60·1	3 above	127	+33	0	0	3146	+ 52	49	- 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 230.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	11	0 (average)	192	+28	49·4	+15·4	20	- 1	25	- 1	935	- 57	25	- 2
	1. SCOTLAND, EAST	6	8	1 more	169	+27	29·3	+ 6·9	21	- 2	27	- 2	1045	- 89	29	- 2
	2. ENGLAND, N.E.	6	9	3 more	142	+12	21·2	+ 3·2	25	- 4	31	- 5	1129	- 72	31	- 2
	3. ENGLAND, EAST	5	7	2 more	126	- 4	22·3	+ 4·9	25	- 3	31	- 4	1293	- 82	36	- 2
	4. MIDLAND COUNTIES	5	8	2 more	137	+11	25·4	+ 5·3	25	- 1	31	- 1	1121	- 69	31	- 2
	5. ENGLAND, SOUTH	6	10	3 more	141	+19	25·1	+ 5·5	23	- 6	29	- 7	1367	- 22	38	- 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	18	7 more	175	+27	47·5	+12·8	26	+ 2	32	+ 3	1163	- 23	32	- 1
	7. ENGLAND, N.W.	7	13	4 more	163	+24	31·0	+ 6·7	19	- 6	23	- 7	1237	+ 63	34	+ 2
	8. ENGLAND, S.W.	6	13	4 more	156	+16	33·6	+ 6·7	25	- 5	31	- 7	1328	- 97	37	- 3
	9. IRELAND, NORTH	6	10	2 more	194	+26	34·7	+ 8·9	31	+ 7	38	+ 9	1025	- 65	28	- 2
	10. IRELAND, SOUTH	6	11	3 more	176	+26	36·3	+ 7·8	25	- 3	31	- 3	1135	-106	31	- 3
	— CHANNEL ISLANDS	6	9	1 more	167	+25	25·6	+ 3·8	26	- 9	32	-11	1556	- 89	44	- 3

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was very cloudy or dull as a whole, with a close atmosphere and rain almost daily, and occasionally in some quantity. Thunder occurred at Ochtertyre on Wednesday, and lightning at some more southern stations later in the week.

Temperature continued above the mean, the excess ranging from 3° in the Channel Islands to as much as 5° or 6° in almost all other parts of the Kingdom. The highest of the maxima were registered between Monday and Thursday and ranged from 72° in England E. and 70° in England S. to 65° in Scotland W. and to 65° or 64° in Ireland. The lowest of the minima, which were recorded either at the beginning or end of the period, varied from 39° in England N.E., 40° in Scotland E., and 41° in Scotland N. to 48° in England S. and Ireland S., 49° in Ireland N., and to 54° in the Channel Islands.

Rainfall exceeded the mean in all districts excepting Scotland N. The excess was not very large generally, but was very considerable in Scotland W. and at some isolated stations in England and Ireland.

Bright Sunshine was deficient over the Kingdom as a whole, but exceeded the normal amount in Ireland N. The percentages of the possible duration ranged from 38 in the district just mentioned to 25 in Scotland N. and to 23 in England N.W.

Barometer and Wind. During the greater part of the week the type of pressure distribution was southerly, the depressions moving in a general northerly direction outside our Islands, and the Southerly wind occasionally increasing to a strong breeze along our extreme western coasts, and more rarely to a moderate or fresh gale. On Thursday, however, the high pressure system to the eastward and south-eastward of our Islands gave way, and an anticyclone appearing over Spain and the south of France, a more westerly type of distribution was brought about, and the depressions moved north-eastwards or eastwards over our most north-western and northern districts. The Westerly wind current had little force at first, but by the end of the period had increased very considerably.

307 | 70 Wy.& S. Ltd.
319 | 90 12 | 02

II.—DATA from which the SUMMARY on page 229 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	57	41	54·0	47·7	50·7	+ 2·6	61	0	6	1·43	+ 0·53	*	*	*	*
	Stornoway	65	45	59·7	49·3	54·3	+ 5·8	86	0	7	1·10	+ 0·03	24·7	+ 2·2	31	+ 3
	Wick	61	47	57·1	50·0	53·4	+ 4·2	80	0	5	0·32	− 0·34	*	*	*	*
	Lairg §	69	42	61·1	46·4	53·4	+ 5·9	80	0	5	0·82	+ 0·04	*	*	*	*
	Glencarron §	68	43	61·7	48·2	54·6	+ 6·4	88	0	5	0·85	− 1·04	*	*	*	*
	Fort Augustus §	66	42	62·1	48·4	54·9	+ 5·7	90	0	5	0·81	− 0·13	15·4	− 0·9	19	− 1
	Fort William	65	47	60·8	51·4	55·9	+ 5·5	97	0	7	2·32	+ 0·61	16·7	− 3·0	21	− 4
1. SCOTLAND, E.	Nairn	65	42	62·0	47·7	54·5	+ 4·9	88	0	4	0·72	+ 0·16	*	*	*	*
	Aberdeen	62	43	57·3	48·9	52·9	+ 2·9	76	0	6	0·34	− 0·03	24·6	− 1·1	31	− 1
	Braemar §	59	40	55·7	45·7	50·5	+ 4·3	69	0	6	0·73	− 0·10	*	*	*	*
	Ochtertyre §	66	43	62·4	50·0	55·9	+ 6·3	97	0	7	1·16	+ 0·30	*	*	*	*
	Leith	69	48	64·6	51·3	57·6	+ 6·3	109	0	5	0·58	+ 0·11	*	*	*	*
	Marchmont §	65	43	60·3	45·6	52·6	+ 3·7	74	0	7	1·01	+ 0·26	20·0	− 3·0	25	− 4
2. ENGLAND, N.E.	Alnwick Castle	66	39	60·3	45·9	52·8	+ 2·6	76	0	6	0·64	− 0·03	*	*	*	*
	Durham	65	43	60·8	47·9	54·0	+ 3·4	84	0	6	1·09	+ 0·49	20·1	− 3·9	25	− 5
	Shields	65	47	61·4	49·3	55·1	+ 4·1	92	0	6	1·36	+ 0·79	*	*	*	*
	Scarborough M	66	47	63·1	49·9	56·2	+ 4·5	99	0	7	0·98	+ 0·33	34·7	—	43	—
	Spurn Head	66	50	63·0	51·3	56·9	+ 4·1	104	0	6	0·58	+ 0·12	*	*	*	*
	Fulbeck (Lincolnshire)	68	49	64·7	51·5	57·8	+ 6·5	111	0	4	0·67	+ 0·15	29·1	—	36	—
3. ENGLAND, E.	Hillington M	71	48	67·0	51·4	58·8	+ 6·6	118	0	6	0·99	+ 0·35	25·3	− 1·7	31	− 2
	Yarmouth	66	50	63·1	52·7	57·7	+ 4·4	110	0	3	0·32	− 0·31	*	*	*	*
	Geldeston	72	47	67·1	51·7	59·0	+ 6·0	119	0	6	0·42	− 0·15	25·8	− 5·2	32	− 6
	Cambridge	71	48	67·5	51·7	59·2	+ 6·3	120	0	4	0·54	+ 0·04	25·7	− 3·5	32	− 4
	Felixstowe	66	54	64·6	56·0	60·1	+ 7·2	127	0	6	0·53	—	28·6†	—	35†	—
	Rothamsted	66	46	64·4	51·8	57·8	+ 6·0	111	0	6	0·91	+ 0·26	26·4	− 3·1	33	− 4
	Shoeburyness	68	53	65·6	55·9	60·5	+ 6·3	130	0	6	1·42	+ 0·93	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	63	44	61·2	48·8	54·7	+ 4·5	89	0	6	0·87	+ 0·17	19·6	—	24	—
	Bawtry (Hesley Hall)	66	45	63·7	46·9	54·9	+ 3·4	90	0	5	0·84	+ 0·28	*	*	*	*
	Nottingham	67	44	65·0	49·6	56·9	+ 4·8	104	0	5	0·79	+ 0·21	31·2	—	39	—
	Loughborough	69	45	65·6	50·6	57·7	+ 5·4	110	0	5	0·64	+ 0·06	*	*	*	*
	Colly Weston (Stamford)	69	43	65·7	48·6	56·7	+ 4·6	103	0	6	0·93	+ 0·35	*	*	*	*
	Cheadle M	64	47	61·7	49·7	55·4	+ 5·0	94	0	5	0·63	− 0·11	*	*	*	*
	Birmingham (Edgbaston)	66	49	63·7	52·2	57·7	+ 6·1	110	0	4	0·59	− 0·03	24·0	—	30	—
	Hereford M	67	48	65·0	52·7	58·6	+ 6·6	116	0	5	0·92	+ 0·29	*	*	*	*
	Cirencester	66	46	63·6	51·5	57·3	+ 6·1	107	0	5	1·03	+ 0·35	24·8	− 2·8	31	− 4
	Oxford	67	48	65·1	53·1	58·8	+ 6·2	118	0	4	0·67	+ 0·06	26·1	− 2·5	32	− 3
5 ENGLAND, S.	London	70	51	67·9	54·1	60·7	+ 6·9	131	0	5	0·86	+ 0·30	24·5‡	+ 0·6‡	30‡	+ 1‡
	Swarraton (Alresford) M	67	49	64·1	53·5	58·6	+ 7·2	116	0	6	0·81	+ 0·08	*	*	*	*
	Dungeness	66	? 51	64·1	56·3	60·0	+ 5·1	126	0	7	0·80	+ 0·14	21·0		26	—
	Hastings (St. Leonards)	64	53	62·9	55·9	59·2	+ 4·6	120	0	6	1·32	+ 0·58	13·2	− 20·5	16	− 25
	Southampton	68	50	66·8	55·1	60·7	+ 6·5	131	0	5	0·73	+ 0·02	25·1	− 6·5	31	− 8
	Portland Bill	64	54	62·3	56·4	59·2	+ 4·9	120	0	7	1·29	—	*	*	*	*
	Shaftesbury M	66	48	64·7	53·3	58·7	+ 7·0	117	0	6	1·05	+ 0·24	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	65	47	61·0	52·7	56·7	+ 6·3	103	0	7	3·59	+ 1·94	*	*	*	*
	Glasgow	63	51	60·8	52·8	56·6	+ 6·8	102	0	6	1·21	+ 0·36	20·2	+ 0·9	25	+ 1
	Cally §	64	48	60·8	50·0	55·1	+ 5·2	92	0	6	1·46	+ 0·42	*	*	*	*
	Aspatria	65	46	62·0	51·0	56·2	+ 5·0	99	0	7	1·35	—	24·0	—	30	—
	Douglas (Isle of Man)	61	50	60·1	53·1	56·4	+ 5·3	101	0	7	1·31	+ 0·37	32·4	+ 4·0	40	+ 5
7. ENGLAND, N.W.	Newton Rigg	63	45	60·0	48·7	54·1	+ 4·5	85	0	7	1·32	—	15·8	—	20	—
	Stonyhurst	62	44	59·6	49·8	54·5	+ 3·6	88	0	7	1·94	+ 0·79	13·9	− 10·7	17	− 13
	Blackpool M	65	45	62·0	51·4	56·5	+ 4·2	102	0	7	1·70	+ 0·82	21·5	− 2·9	27	− 4
	Manchester (Prestwich)	67	45	61·6	50·5	55·8	+ 4·6	97	0	6	1·32	+ 0·42	12·7	—	16	—
	Liverpool Obsy. (Bidston)	64	48	61·7	51·0	56·1	+ 3·3	99	0	7	0·87	+ 0·12	13·8	—	17	—
	Chester (Hawarden Bridge)	67	46	64·2	51·1	57·3	+ 4·2	107	0	6	1·57	—	*	*	*	*
	Llandudno M	67	50	63·3	54·1	58·5	+ 4·7	116	0	6	0·65	− 0·13	21·7	− 2·7	27	− 3
	Holyhead	65	53	60·9	54·1	57·3	+ 3·7	107	0	7	0·80	− 0·04	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	62	54	60·1	56·1	58·0	+ 3·6	112	0	6	0·94	+ 0·10	24·4	− 4·8	30	− 6
	Clifton	67	52	64·2	55·1	59·4	+ 6·3	122	0	6	1·32	+ 0·50	*	*	*	*
	Bath	68	50	64·9	53·7	59·0	+ 5·9	119	0	5	1·02	+ 0·30	27·4	—	34	—
	Arlington (N. Devon)	65	49	61·9	52·4	56·9	+ 3·6	104	0	7	2·31	+ 1·05	*	*	*	*
	Cullompton M	67	45	64·8	52·6	58·4	+ 5·6	115	0	5	0·95	+ 0·15	24·7	− 3·1	31	− 4
	Falmouth	63	53	61·4	55·1	58·1	+ 3·6	113	0	5	1·15	+ 0·09	24·4	− 7·6	30	− 9
	Plymouth	64	55	62·6	56·4	59·4	+ 5·4	122	0	5	1·19	+ 0·36	25·8	− 4·6	32	− 6
9. IRELAND, N.	Malin Head	63	50	59·9	52·3	55·9	+ 3·6	97	0	4	0·62	− 0·09	*	*	*	*
	Edenfel (Omagh)	62	49	60·0	50·7	55·1	+ 5·7	92	0	6	1·13	+ 0·30	*	*	*	*
	Blacksod Point	61	52	58·4	53·9	56·0	+ 2·9	98	0	7	1·88	+ 0·82	*	*	*	*
	Markree Castle	63	50	60·6	51·3	55·7	+ 5·3	96	0	7	1·07	+ 0·16	27·9	+ 5·3	34	+ 7
	Armagh	64	51	61·7	52·0	56·6	+ 6·2	102	0	7	0·66	0·00	33·4	+ 9·5	41	+ 12
	Donaghadee	62	50	60·6	53·0	56·6	+ 5·1	102	0	3	0·61	− 0·06	*	*	*	*
10. IRELAND, S.	Dublin	65	52	63·4	52·9	57·9	+ 5·2	111	0	6	0·50	− 0·08	33·4	+ 3·9	41	+ 5
	Birr Castle	65	50	62·9	51·3	56·8	+ 5·7	104	0	6	0·55	− 0·12	29·9	+ 3·3	37	+ 4
	Kilkenny	62	49	61·1	52·7	56·7	+ 4·8	103	0	7	0·95	+ 0·29	*	*	*	*
	Waterford	62	50	60·4	53·0	56·5	+ 4·2	102	0	6	0·91	+ 0·11	*	*	*	*
	Roche's Point	61	52	59·9	54·7	57·2	+ 3·4	106	0	7	0·91	+ 0·02	*	*	*	*
	Valencia	61	52	59·9	53·6	56·6	+ 2·4	102	0	7	2·12	+ 1·00	12·7	− 14·9	16	− 18
	Killarney	65	52	63·1	54·6	58·7	+ 5·8	117	0	6	1·41	+ 0·35	*	*	*	*
	Foynes	63	48	61·3	50·1	55·4	+ 3·1	94	0	6	1·38	+ 0·62	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	55	62·9	55·4	59·0	+ 2·7	119	0	6	0·75	− 0·03	28·6	− 4·8	35	− 6
	Jersey	69	54	65·7	57·0	61·1	+ 3·9	134	0	5	1·01	+ 0·17	23·5	− 12·5	29	− 15

Stations Marked M are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

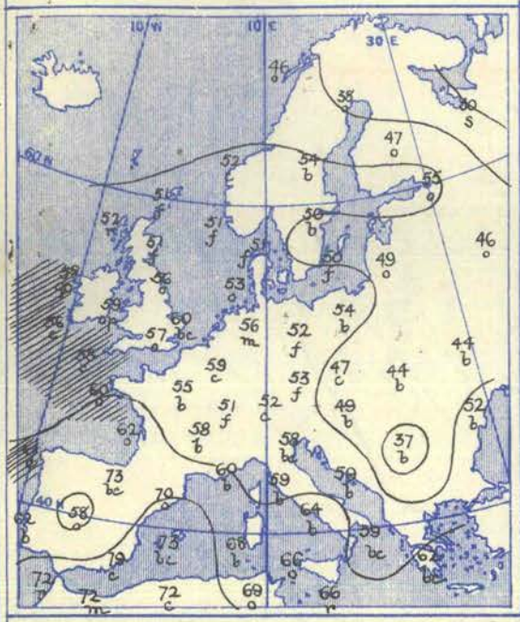
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 27th September, 1903.

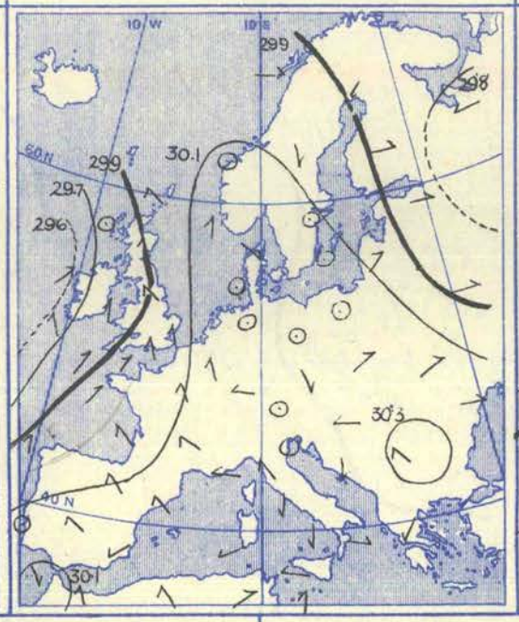
Temperature and Weather.

8 a.m.

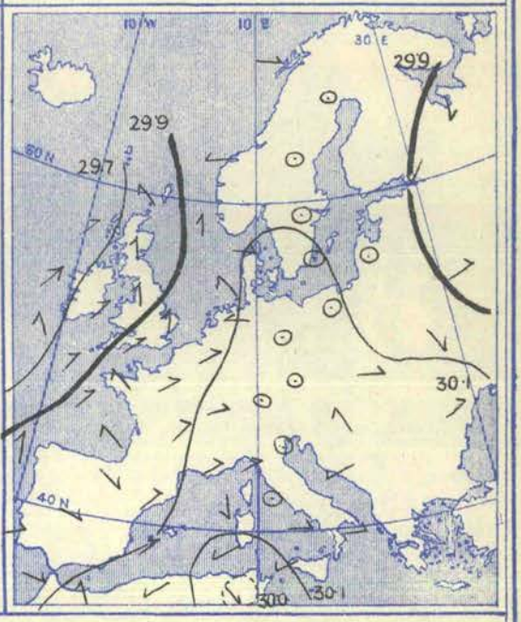


Barometer and Wind.

8 a.m.



6 p.m.



Weather at 8 a.m. fine or fair in most Continental regions, but fog reported from some Scandinavian, Dutch, and German stations, rain at San Fernando, and snow at Archangel. Dull or cloudy over the United Kingdom, with showers in the west and fog in the north-east. Rain later in most parts of the British Isles, the north of France, the Netherlands, and the west of Norway, and also at Vienna and Buda-Pesth. Largest amount, 0·7 in. at Bodö, 0·8 in. at Flushing, and 1·0 in. at Vienna. Thunder and lightning occurring at Biarritz.

Temperature risen decidedly over Great Britain and France. Readings in morning highest, 79° at Alicante, 78° at Palma, 72° at Algiers, and 68° at Cagliari. Lowest, (1) 30° at Archangel, (2) 37° at Hermanstadt, (3) 41° at Kharkov, (4) 41° at Karlstad. Subsequently rising to 67° at Leith and Oxford, to above 70° in Belgium, France, and most parts of southern Europe, and to 80° or a little higher in a few localities. Highest readings, 84° at San Fernando, 86° at Sanguinaires, and 88° at Nemours.

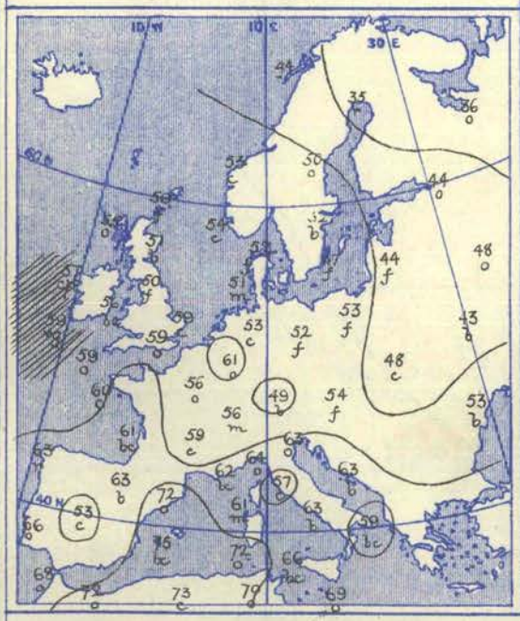
Wind light and anticyclonic in nearly all Continental regions, but moderate to fresh or strong from the Southward over the United Kingdom. Scarcely any change during day.

Barometer falling very generally except in the north of Sweden—most over the south of Russia and the British Isles. Morning readings ranging from 30·3 ins. and upwards in an anticyclone having its centre over the Balkan Peninsula to below 29·8 ins. in a large but not deep disturbance over northern Russia, and to below 29·6 ins. in another cyclonic system off our extreme western coasts. Pressure giving way later in almost all regions, but rate of change rather irregular. Depression off our west coasts moving away northwards, but indications of another approaching. Some small secondary systems forming in various parts of our area.

Monday, 28th September, 1903.

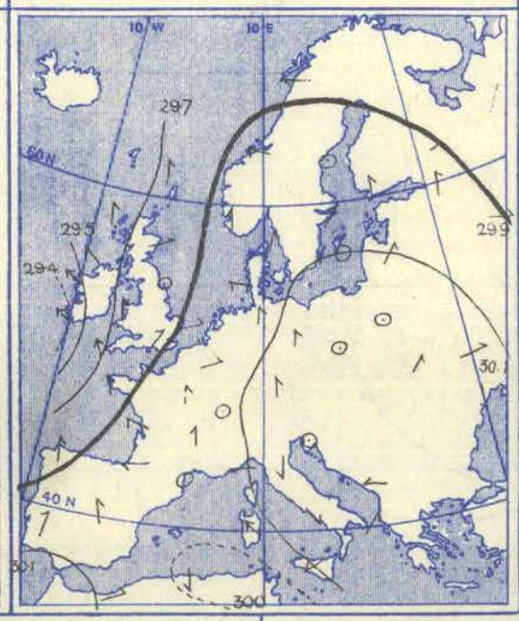
Temperature and Weather.

8 a.m.

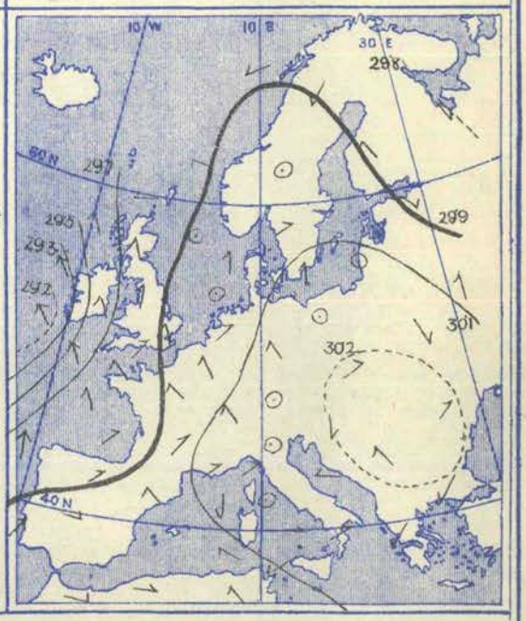


Barometer and Wind.

8 a.m.



6 p.m.



Weather at 8 a.m. fine over Italy and its neighbourhood, but cloudy or dull over our area as a whole. Rainy in the west of the Iberian Peninsula and in the west of Ireland, as well as at Bodo and Ulealborg, and foggy at Sumburgh Head, Shields, the Skager Rack, and in some parts of central Europe. Small or moderate amounts of rain falling at most stations in our Islands and Brittany and also in some of those in Scandinavia, and as much as 0·8 in. at Malta. Thunder and lightning again occurring at Biarritz.

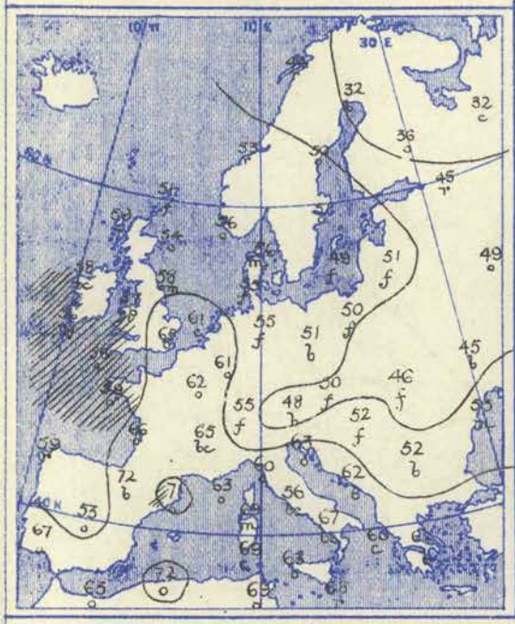
Temperature changed irregularly. Morning readings ranging from 75° at Palma and about 70° at a few other stations in the far south to 61° at Dungeness and The Helder to 50° at North Shields, 41° at Kharkov, 36° at Archangel, and to 35° at Ulealborg. Rising during day to 69° in London, 73° at Frankfürt, to between 70° and 80° over France and southern Europe, and to above 80° in Algeria. Maxima not much above 60° on our own east coast and only 53° in the Shetlands.

Wind remaining light and anticyclonic over the greater part of our area, but South-Easterly or Southerly cyclonic winds prevailing over our Islands and on the western coasts of the Continent, and blowing strongly or freshly in Ireland and Wales. No change in direction during day, but force increasing to a moderate or fresh gale on our western coasts.

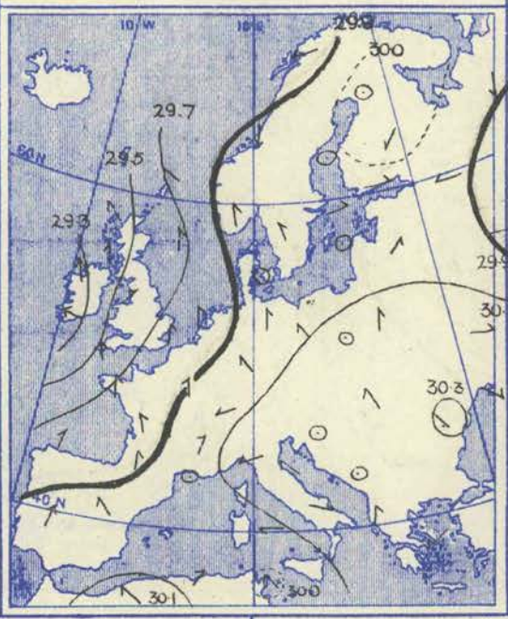
Barometer at 8 a.m. ranging from 30·0 ins. to 30·2 ins. in a very large anticyclone covering the greater part of our area, and having its centre over Hungary, to below 29·4 ins. in a depression travelling northwards off the west of Ireland. A fresh disturbance affecting our south-west coasts later and a rather brisk fall of the barometer in Ireland causing the gradients to become steeper over the western districts generally. Anticyclone increasing somewhat in intensity.

Tuesday, 29th September, 1903.

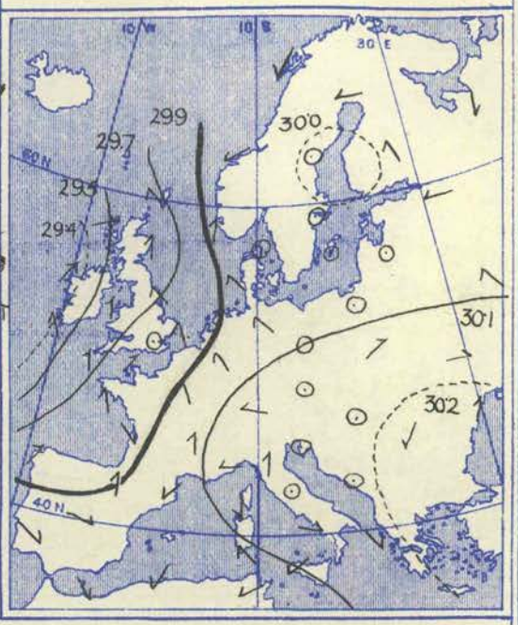
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or overcast over our area as a whole, with rain on the west coast of the Spanish Peninsula, at some of our own western stations, and also in the north-west of Norway and at St. Petersburg. Fog or mist prevailing in several parts of central Europe. Considerable falls of rain experienced later in most parts of our Islands, the west and north of France, and at a few Russian stations. Largest amounts, 0·5 in. at Jersey, 0·6 in. at Le Mans, and 0·8 in. at Sumburgh Head.

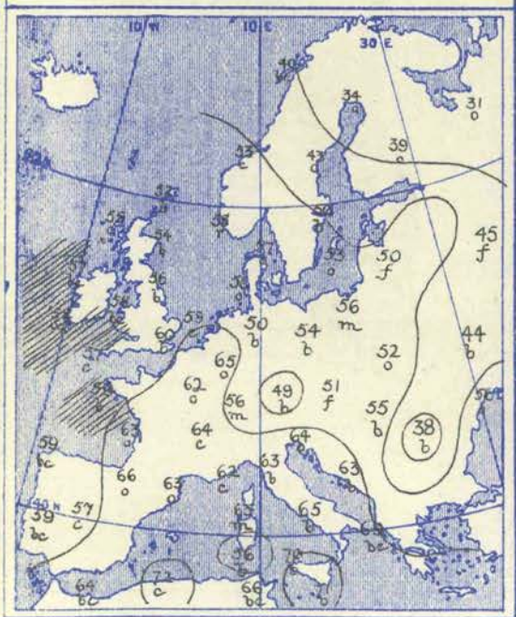
Temperature risen as a whole, especially over France and Great Britain. Morning readings ranging from 72° at Algiers, 71° at Barcelona, 69° at Palermo, 65° in London, and 63° at Nottingham and Leith, to 50° or below in many parts of eastern and central Europe, and to 32° in the far north. Rising later to 69° in London, 70° at Margate, and to above 70° in nearly all parts of the Netherlands, France, central Europe, and Italy, and to 81° at Tunis. Maximum only 53° in the Shetlands and 39° at Haparanda.

Wind at 8 a.m continuing light and anticyclonic over the major portion of the Continent, and Southerly in the most western countries. Strong to a moderate gale in Ireland and backing towards East at Valencia Island. Fresh or strong in Portugal. Very little change during day as a whole, but wind veering again in the south-west of Ireland and decreasing somewhat in force.

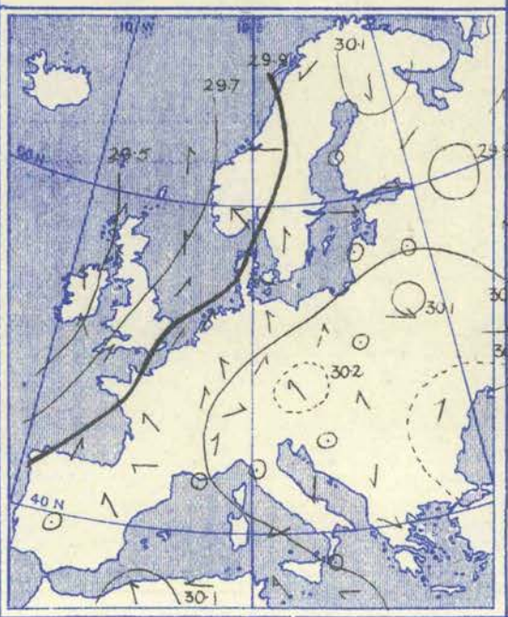
Barometer fallen in our Islands, France, and the Iberian Peninsula, changed little elsewhere. Readings at 8 a.m. ranging from 30·1 ins. to 30·2 ins. and upwards in an extensive high-pressure area embracing the south-eastern half of Europe, to 29·9 ins. and less in the north of Russia, and to less than 29·3 ins. off the west of Ireland. Gradients slight except over our own western districts. No change in the general distribution of pressure later, but shallow secondary depressions appearing over the Bay of Biscay and England. Barometer rising again in Ireland.

Wednesday, 30th September, 1903.

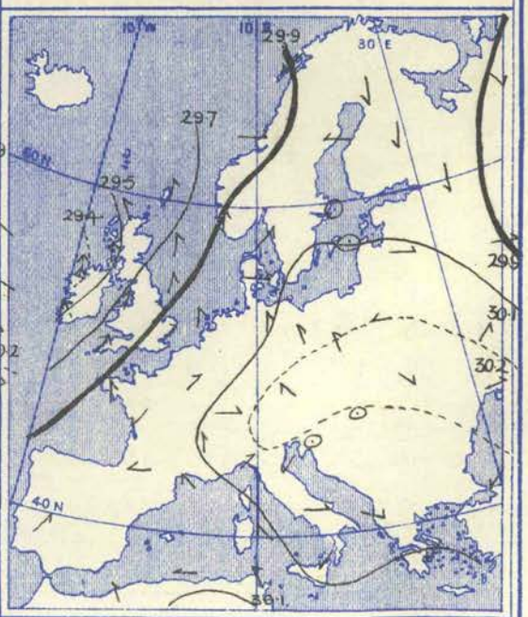
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fair or fine in most regions, but rainy at St. Petersburg, and foggy at some other Russian stations, as well as at a few in central Europe and on the shores of the Baltic. Slight rain later in several parts of Great Britain, heavy amounts in Ireland and at Brussels, and about an inch at some French and Scandinavian stations. Thunderstorms occurring in many French localities.

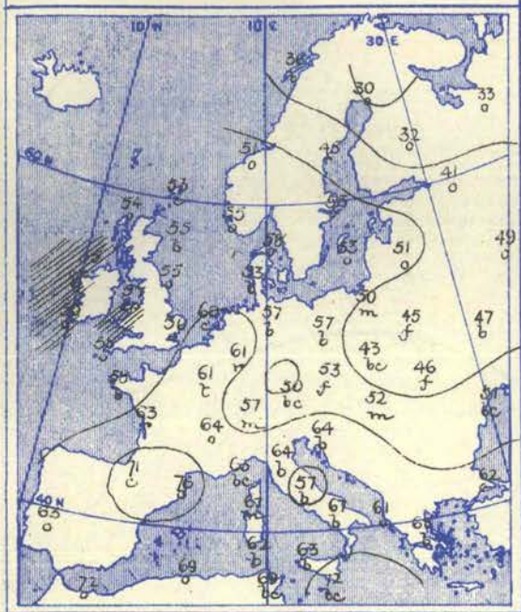
Temperature fallen as a whole. Morning readings ranging from 71° at Malta, 70° at Palermo, 65° at Cagliari and Biarritz, and 61° at Dungeness, to a little below or above 50° over the major portion of central and eastern Europe, to 40° at Bodö, and to 31° at Archangel. Rising during day to 70° in London, to some degrees higher in Germany and France, Italy, and the Mediterranean generally, and to 86° at Sanguinaires. Maximum not exceeding 60° in the south and west of Ireland.

Wind in morning Southerly (South-West to South-East) over all the western countries, and strong in force on our own western coasts. Light and anticyclonic over all the central and southern regions, but a complete cyclonic circulation prevailing over Finland and the north of Russia. No great or general change later, but Russian cyclonic movement dying out, and the Southerly wind increasing to a fresh to strong gale on the west coast of Ireland.

Barometer risen in most localities. Readings at 8 a.m. ranging from 30·1 ins. to 30·2 ins. and above in a large area covering all the central and eastern countries and the greater part of the Mediterranean, to 29·9 ins. and less in a depression having its centre near St. Petersburg, and to 29·4 ins. in another system off the west of Ireland. Latter moving slowly northwards during day, and Russian system either moving away eastwards or dispersing. A shallow secondary disturbance forming over the Bay of Biscay.

Thursday, 1st October, 1903.

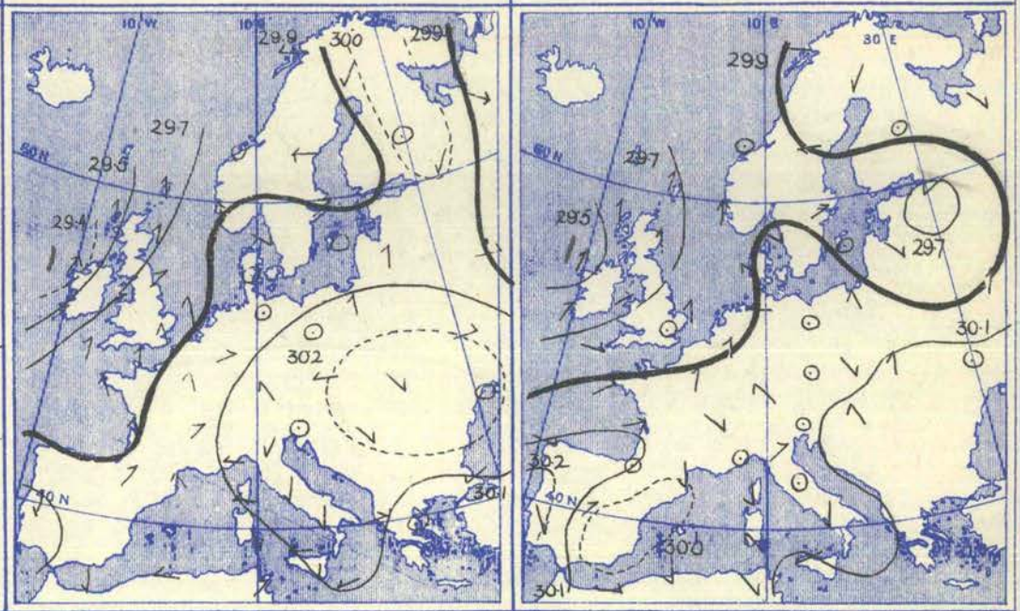
Temperature and Weather. 8 a.m.



Weather at 8 a.m. rainy in several parts of France, with a thunderstorm at Paris, and showers on our own north-west coasts. Rain also falling over the Gulf of Finland and at Hernösand. Fair in most other regions, but foggy at some stations in central Europe. Rain falling very generally later except in Germany, Austria-Hungary, and the most southern parts of our area—more than an inch at Christiansund and in some parts of France. Thunderstorms occurring at Utrecht and at many French stations.

Temperature changed rather irregularly. Readings at 8 a.m. highest, 76° at Barcelona, 72° at Nemours and Malta, and 71° at Biarritz. Lowest, 30° at Haparanda and Uleaborg, 33° at Archangel, 41° at St. Petersburg, 43° at Cracow, and 53° at Oxford. Rising later to 70° in London and to between 70° and 80° over all the southern and central regions. Maxima below 40° in the extreme north, and only 46° at St. Petersburg.

Barometer and Wind. 8 a.m. and 6 p.m.

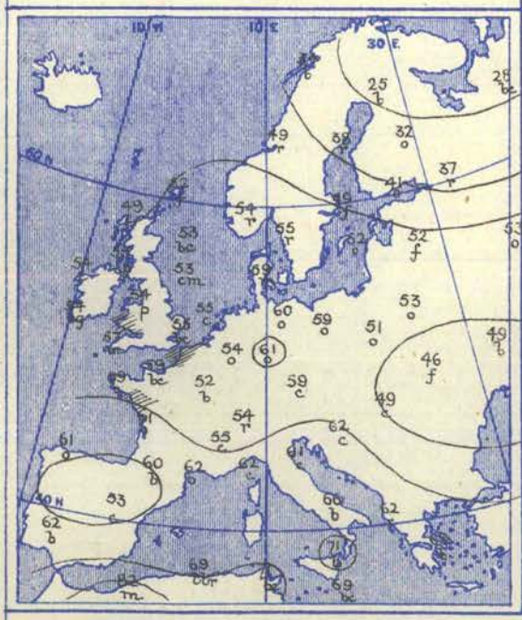


Wind at 8 a.m. still light and anticyclonic over the central and southern countries, and mainly South-Easterly or Southerly over the United Kingdom and France. Fresh or strong at some of our most western stations. A separate cyclonic movement shown over Scandinavia. No great change taking place later, but Scandinavian cyclonic circulation becoming transferred further to the eastward.

Barometer fallen over our area as a whole, but risen over Austria-Hungary and Portugal. Morning readings ranging from 30·1 ins. to 30·3 ins. in an anticyclone embracing the whole of central and eastern Europe and Italy, to less than 29·9 ins. in very shallow secondary systems over the Bay of Biscay and our south-eastern counties, to less than 29·8 ins. over central Scandinavia, and to below 29·4 ins. in a large depression off our own north-west coasts. Latter moving north-eastwards later; another high-pressure area advancing over Portugal, and the wind over western Europe becoming more westerly. Scandinavian depression moving eastwards.

Friday, 2nd October, 1903.

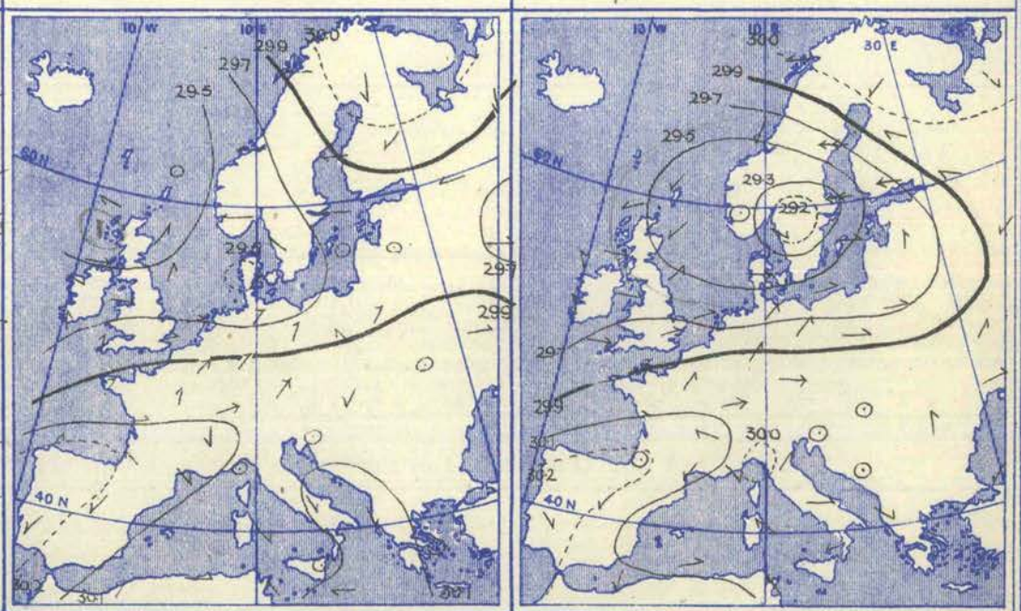
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine and bright in a few scattered localities, but cloudy or dull as a whole, with showers on our north-west coasts, and rain at St. Petersburg and in many parts of Scandinavia, as well as at Belfort and Cape Sicié. Fog prevailing at Sumburgh Head and also in some Austro-Hungarian districts. Rain later throughout all the northern and north western countries; amounts large in many places—more than an inch in Scandinavia and Finland. A thunderstorm experienced at Cuxhaven.

Temperature fallen generally, but risen in some southern and central regions. Morning readings highest, 82° at Nemours, 71° at Palermo, and 69° at Patras. Lowest (1) 25° at Haparanda, (2) 43° at Cracow, (3) 49° at Stornoway, (4) 53° at Madrid. Maxima during day, 65° in London, above 70° in most parts of southern Europe, and as high as 86° at Tunis. Thermometer failing to rise to 40° in the north of Scandinavia and only touching 32° at Haparanda.

Barometer and Wind. 8 a.m. and 6 p.m.

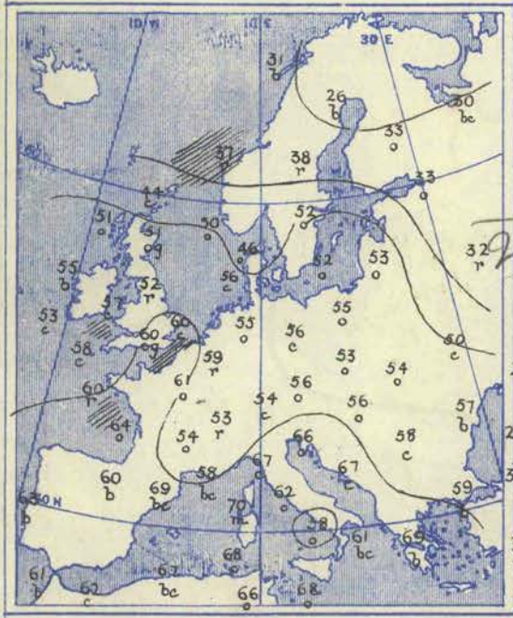


Wind in morning anticyclonic over the southern half of our area and also in the extreme north. Partial cyclonic circulations of no great force shown elsewhere. Wind increasing to a gale from the Eastward over Sweden by evening. Not much change elsewhere, but backing to the Southward along the west coast of Ireland.

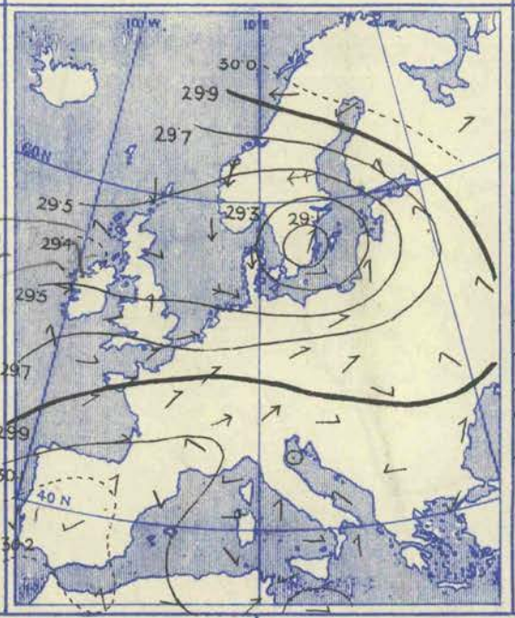
Barometer at 8 a.m. highest, above 30·2 ins. in Portugal and the north-west of Spain, and above 30·1 ins. in the more southern regions generally; above 30·0 ins. in Lapland. Lowest, below 29·5 ins. in a depression over Scotland and in another over the North Sea; below 29·7 ins. in a disturbance over central Russia. Scotch and North Sea disturbances apparently merging, moving eastwards, and becoming deeper by evening. Russian depression disappearing, but a fresh system approaching Ireland.

Saturday, 3rd October, 1903.

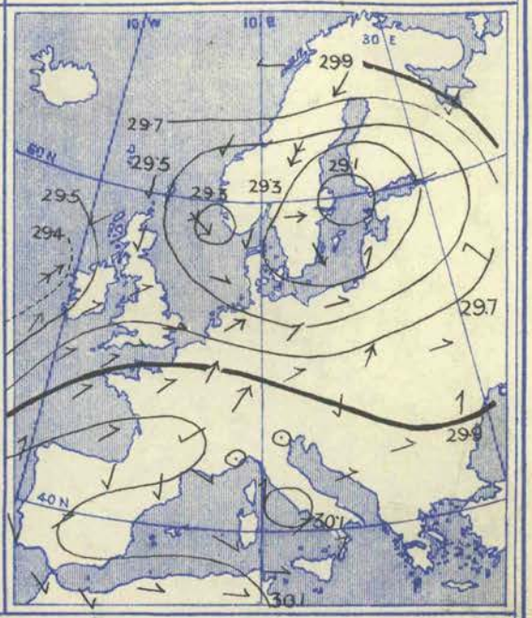
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast very generally, with rain in many parts of Scandinavia, Finland, the north of France, Belgium, and at several of our own stations. Fine and bright in Spain, Algeria, and Greece. Rain in all except the most southern regions later (snow in the far north)—amounts heavy over Germany and Finland. Half an inch also falling at Rome.

Temperature risen over England, France, Italy, and the central countries, fallen in most other regions—as much as 21° at Moscow. Morning readings highest, 70° at Sanguinaires, 69° at Barcelona and Athens, and 67° or 66° on the shores of the Adriatic. Lowest, 26° at Haparanda, 30° at Archangel, 31° at Bodö, and 32° at Moscow. Below 40° in many northern localities. Lowest value in our Islands, 44° at Sumburgh Head. Rising subsequently to 66° in London, to a few degrees higher in several parts of Germany and Austria, and to about 80° in Italy and Spain.

Wind at 8 a.m. showing a complete cyclonic movement over northern Europe, the North-Easterly and Easterly current over Scandinavia and Finland being strong to a gale in force. A partial cyclonic circulation prevailing over the north of our Islands. Light and variable over the southern regions. Backing towards South on our western coasts later, and increasing to a moderate or fresh gale.

Barometer in morning ranging from above 30·2 ins. over Spain and Portugal, and above 30·0 ins. over the whole of southern Europe and also in the far north, to about 29·4 ins. in a depression having its centre near Barra Head, and to 29·0 in a deeper system near Stockholm. Another depression of considerable depth arriving on the west coast of Ireland by evening, and a secondary forming over the south-west of Norway. Swedish system moving slowly north-eastward.

IV.—GENERAL NOTES, etc.

Until the week drew towards its close a large area of high pressure embraced the major part of the Continent, including the Scandinavian Peninsula, and had its centre over the more central and southern countries. The depressions, were, therefore, confined to the regions bordering the Atlantic, and, with the exception of some secondaries which appeared over the Bay of Biscay, France, and our south-eastern counties, they all travelled northwards or north-eastwards outside our own western coasts. The wind during this time was Southerly over all the western countries, and frequently blew strongly in Ireland and over the west of Great Britain, and occasionally attained the force of a gale, but the anticyclonic winds over the Continent were very light. Towards the end of the week the anticyclone gave way, and a new one approaching the Iberian Peninsula and the south of France, the depressions took a north easterly or easterly track over our Islands and the northern countries. The chief of these was one whose centre lay near Stockholm at the close of the week, and which appears to have been formed by the merging and growing deeper of a large depression which lay over Scotland on Friday and a secondary which was shown over the North Sea. This brought very strong winds or strong gales to the whole of Scandinavia and its neighbourhood, accompanied by heavy falls of rain or snow, and a temperature below the freezing point. Over Europe as a whole the weather was fair or fine, and but little rain fell during the earlier days of the week excepting at our western stations. Temperature remained high over the greater part of the United Kingdom, and was at times rather high over central Europe and Germany, but taken as a whole there was a tendency for the readings to become lower than of late. At some time or other thunder or lightning was experienced in a few British localities, and thunderstorms in France, at the mouth of the Elbe, and in Denmark.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 230.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	21·7	− 0·1	27	0	SHEFFIELD	24·6	—	30	—	WESTBOURNE †	26·2†	− 6·2	32†	− 8
STRATHPEFFER SPA	20·3	− 4·0	25	− 5	WORKSOP	24·4	+ 1·1	30	+ 1	VENTNOR HOSPITAL	25·7	− 8·8	32	− 11
EDINBURGH	19·4	− 1·6	24	− 2	THURCASTON	25·8	+ 1·0	32	+ 1	BOURNEMOUTH	—	—	—	—
COCKLE PARK	22·0	—	28	—	TUNBRIDGE WELLS	20·1	—	25	—	MARLBOROUGH	22·1	− 4·6	27	− 6
NEWCASTLE-ON-TYNE	13·1	—	16	—	MARGATE	28·0	− 1·7	35	− 2	SOUTHPORT	15·4	—	19	—
YORK	?19·0	− 4·6	?24	− 6	BROADSTAIRS					RHYL	24·3	—	30	—
CROMER	27·5	—	34	—	RAMSGATE	—	—	—	—	ABERDOVEY †	30·7†	—	38†	—
LOWESTOFT	22·2	—	27	—	EASTBOURNE	20·0	−13·7	25	− 17	TENBY	24·5	− 5·5	30	− 7
DUNMOW	24·2	—	30	—	BRIGHTON	24·3	− 9·2	30	− 12	TORQUAY	23·9	− 7·5	30	− 9
					WORTHING	26·3	—	33	—	NEWQUAY				
					BOGNOR †					GUERNSEY †	24·6†	− 9·4	30†	− 12
					WATERGATE PARK	19·7	—	24	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Sept. 12th, 1903	Liverpool	—	—	—	—	—	—	—	—	—	—	—	27·2	—	30	—
" " 19th, "	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	42·9	—	49	—
" " " "	Marlborough	—	—	—	—	—	—	—	—	—	—	—	31·7	+ 1·2	36	+ 1

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32, ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 40.] *Third Series.* WEEK ENDING SATURDAY, OCTOBER 10TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 236.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	26	49·7	37·6	43·5	4 below	29	−10	12	+ 5	1725	− 90	503	− 56
	1. SCOTLAND, EAST	60	29	50·3	40·4	45·3	3 below	30	−13	4	− 4	1957	−199	513	− 91
	2. ENGLAND, N.E.	63	33	55·7	45·3	50·3	1 above	58	+ 9	0	− 4	2319	− 24	342	−147
	3. ENGLAND, EAST	66	37	60·7	49·1	54·7	4 above	89	+32	0	− 5	2783	+ 66	322	−214
	4. MIDLAND COUNTIES	64	33	58·5	47·1	52·6	3 above	74	+22	0	− 6	2573	−106	361	−189
	5. ENGLAND, SOUTH	67	38	61·7	52·0	56·7	5 above	103	+37	0	− 3	2936	− 29	208	−186
Principal Grazing Districts.	6. SCOTLAND, WEST	59	30	53·8	43·8	48·7	0 (average)	47	− 2	0	− 5	2233	− 53	324	−100
	7. ENGLAND, N.W.	67	29	56·7	47·6	52·0	1 above	70	+16	0	− 3	2488	− 17	262	−133
	8. ENGLAND, S.W.	65	40	59·8	51·3	55·5	4 above	95	+32	0	− 2	2833	+ 69	162	−142
	9. IRELAND, NORTH	61	35	55·7	46·2	50·9	1 above	62	+12	0	− 4	2309	−102	286	− 71
	10. IRELAND, SOUTH	65	33	59·1	46·6	52·6	2 above	74	+15	0	− 3	2745	+ 17	183	− 73
	— CHANNEL ISLANDS	66	50	61·7	54·4	58·0	3 above	112	+27	0	0	3258	+ 79	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 236.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	17	5 more	198	+30	51·1	+15·9	18	− 1	24	− 2	953	− 58	25	− 2
	1. SCOTLAND, EAST	7	19	12 more	176	+30	31·2	+ 8·1	13	− 9	18	−11	1058	− 98	28	− 3
	2. ENGLAND, N.E.	7	35	28 more	149	+15	24·7	+ 6·1	21	− 1	27	− 1	1150	− 73	31	− 2
	3. ENGLAND, EAST	6	12	6 more	132	− 2	23·5	+ 5·5	20	− 7	26	− 9	1313	− 90	36	− 2
	4. MIDLAND COUNTIES	7	18	12 more	144	+14	27·2	+ 6·5	19	− 6	24	− 7	1140	− 74	31	− 2
	5. ENGLAND, SOUTH	7	12	5 more	148	+22	26·3	+ 6·0	22	− 6	28	− 8	1389	− 28	38	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	6	27	16 more	181	+29	50·2	+14·4	15	− 9	19	−12	1178	− 32	32	− 1
	7. ENGLAND, N.W.	7	18	9 more	170	+27	32·8	+ 7·6	19	− 1	24	− 1	1256	+ 62	34	+ 2
	8. ENGLAND, S.W.	7	21	12 more	163	+19	35·7	+ 7·9	17	−10	22	−13	1345	−107	37	− 3
	9. IRELAND, NORTH	7	20	12 more	201	+29	36·7	+10·1	22	0	29	0	1047	− 65	28	− 2
	10. IRELAND, SOUTH	6	14	5 more	182	+28	37·7	+ 8·4	25	− 1	33	− 1	1160	−107	31	− 3
	— CHANNEL ISLANDS	7	15	7 more	174	+28	27·1	+ 4·4	20	−11	26	−14	1576	−100	43	− 3

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was extremely unsettled, rain falling every day at the majority of the stations, and frequently in very large amounts—especially in the north and north-east.

Temperature continued above the mean excepting in Scotland W., where it was just equal to it, and in the north and east of Scotland, where the average for the week was 3° or 4° below the normal. In England S.W. and E. the excess was 4°, and in England S. as much as 5°. The highest of the maxima were registered during the earlier days of the week, and ranged from 67° in England S. and N.W. and 66° in England E. and the Channel Islands to 59° in Scotland W. and to 57° in Scotland N. The lowest of the minima, recorded during the latter half of the period, were as low as 26° in Scotland N., 29° in Scotland E. and England N.W., and 30° in Scotland W. In the other districts they ranged from 33° in England N.E., the Midland Counties, and Ireland S. to 40° in England S. W., and to 50° in the Channel Islands.

Rainfall was greatly in excess of the mean. In most districts the fall was two or three times the normal amount, while in England N.E., it was no less than five times as large. Falls of more than an inch were very common in Scotland during the earlier days of the week, and still larger quantities were experienced later on in the north-east of England. At Seaham as much as 2·48 ins. was measured on the morning of Friday, at Durham 2·51 ins. followed by 0·51 in. on Saturday, at North Shields 2·58 ins., followed by 0·54 in. on Saturday, and at Alnwick Castle 2·68 ins., followed by 0·43 in., while at Scarborough the measurements for the two days were 1·80 ins. and 1·12 ins. The largest aggregate for the week was that at Alnwick Castle, where it amounted to 5·07 ins.

Bright Sunshine was deficient in all districts excepting Ireland N. The percentage of the possible duration ranged from 33 in Ireland S. to 19 in Scotland W. and to 18 in Scotland E.

Barometer and Wind. Several important cyclonic disturbances passed over or in the immediate neighbourhood of our Islands during this period, causing very strong winds or gales on almost all coasts. One of the two chief depressions was that seen off Ireland on Tuesday morning, and which, during the ensuing twenty-four hours, travelled quickly eastwards to Denmark. The other reached Wales and its vicinity from the southward on Thursday morning and was at first very shallow. It subsequently travelled slowly eastwards across England to Germany, and during its passage was continually increasing in depth. On Saturday morning there were indications of the approach of another disturbance towards Ireland, and by the close of the week it had become evident that this system was both deep and extensive.

307 | 70 | 90 Wy. & S. Ltd. 12 | 02

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
C. SCOTLAND, N.	Sumburgh Head	48	36	46·4	37·9	42·0	- 4·9	12	11	7	0·48	- 0·47	*	*	*	*
	Stornoway	54	33	50·6	39·1	44·7	- 2·6	31	8	5	1·49	+ 0·35	20·2	- 1·2	27	- 2
	Wick	57	27	51·3	34·7	42·8	- 4·8	36	20	7	1·19	+ 0·52	*	*	*	*
	Lairg Ⓢ	57	26	50·2	34·6	42·2	- 3·9	32	21	5	0·86	+ 0·02	*	*	*	*
	Glencarron Ⓢ	52	29	48·5	37·1	42·6	- 4·2	25	14	6	2·33	+ 0·39	*	*	*	*
	Fort Augustus Ⓢ	55	27	49·8	38·7	44·1	- 3·5	29	9	6	1·88	+ 0·96	7·8	- 7·2	10	- 9
	Fort William	55	31	51·1	40·8	45·8	- 3·2	32	3	6	3·74	+ 2·04	12·4	- 6·0	16	- 8
1. SCOTLAND, E.	Nairn	55	30	50·6	37·7	44·0	- 3·9	32	12	6	0·74	+ 0·18	*	*	*	*
	Aberdeen	57	36	50·9	41·0	45·8	- 2·7	31	3	6	0·75	+ 0·09	13·6	- 10·8	18	- 14
	Braemar Ⓢ	51	29	45·9	36·5	41·1	- 3·7	11	21	6	0·78	- 0·08	*	*	*	*
	Ochtertyre Ⓢ	56	31	51·6	40·9	46·1	- 2·1	33	3	7	2·81	+ 1·91	*	*	*	*
	Leith	60	36	52·7	44·1	48·3	- 1·5	44	0	7	2·19	+ 1·72	*	*	*	*
	Marchmont Ⓢ	56	36	50·3	42·4	46·2	- 1·0	29	0	7	3·96	+ 3·18	11·5	- 9·9	15	- 13
2. ENGLAND, N.E.	Alnwick Castle	59	37	53·4	44·4	48·8	+ 0·1	48	0	7	5·07	+ 4·34	*	*	*	*
	Durham	59	36	53·5	43·9	48·6	- 0·2	46	0	7	4·20	+ 3·54	24·2	+ 1·8	31	+ 2
	Shields	62	35	54·4	45·0	49·6	0·0	53	0	7	4·30	+ 3·70	*	*	*	*
	Scarborough Ⓜ	63	33	57·1	43·3	50·0	- 0·1	56	0	7	3·64	+ 2·95	19·8	—	26	—
	Spurn Head	61	42	57·3	47·7	52·4	+ 1·0	73	0	6	1·75	+ 1·25	*	*	*	*
	Fulbeck (Lincolnshire)	63	34	58·3	47·3	52·6	+ 3·3	74	0	7	1·77	+ 1·22	20·3	—	26	—
3. ENGLAND, E.	Hillington Ⓜ	63	38	60·1	47·5	53·6	+ 3·2	81	0	7	2·11	+ 1·47	19·4	- 5·4	25	- 7
	Yarmouth	62	39	59·6	48·3	53·8	+ 2·4	83	0	6	1·02	+ 0·37	*	*	*	*
	Geldeston	65	39	61·6	48·8	55·0	+ 3·9	91	0	6	1·08	+ 0·50	18·9	- 9·5	25	- 12
	Cambridge	64	37	62·1	48·6	55·2	+ 4·4	92	0	6	1·77	+ 1·24	21·0	- 5·7	27	- 7
	Felixstowe	62	—	61·0	—	—	—	—	-	3	0·83	—	22·7†	—	30†	—
	Rothamsted	62	37	59·2	49·1	54·0	+ 4·2	84	0	6	1·17	+ 0·51	19·5	- 8·2	25	- 11
	Shoeburyness	66	39	61·7	52·1	56·8	+ 4·4	104	0	5	0·56	+ 0·06	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	59	36	54·2	44·5	49·2	+ 0·4	50	0	7	3·40	+ 2·67	22·5	—	29	—
	Bawtry (Hesley Hall)	62	36	56·0	44·3	50·0	+ 0·5	56	0	7	2·00	+ 1·41	*	*	*	*
	Nottingham	64	35	60·1	47·6	53·7	+ 3·6	82	0	7	2·14	+ 1·56	20·6	—	27	—
	Loughborough	63	33	59·8	48·0	53·7	+ 3·3	82	0	7	1·62	+ 1·01	*	*	*	*
	Colly Weston (Stamford)	64	48	59·3	47·6	53·3	+ 3·0	79	0	7	1·70	+ 1·10	*	*	*	*
	Cheadle Ⓜ	62	34	56·4	45·3	50·7	+ 2·1	61	0	7	1·35	+ 0·59	*	*	*	*
	Birmingham (Edgbaston)	62	38	58·5	47·7	52·9	+ 2·8	76	0	7	1·60	+ 0·96	12·7	—	17	—
	Hereford Ⓜ	64	37	60·8	49·3	54·9	+ 4·7	90	0	7	1·27	+ 0·63	*	*	*	*
	Cirencester	63	37	59·2	46·6	52·7	+ 3·2	75	0	7	1·79	+ 1·09	18·5	- 7·2	24	- 9
	Oxford	63	39	60·4	50·1	55·1	+ 4·2	92	0	6	1·24	+ 0·61	19·7	- 6·3	26	- 8
5. ENGLAND, S.	London	65	38	61·6	50·6	55·9	+ 4·0	97	0	7	0·96	+ 0·38	17·6‡	- 3·3‡	23‡	- 4‡
	Swarraton (Alresford) Ⓜ	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Dungeness	65	39	62·7	54·3	58·4	+ 5·0	115	0	5	0·58	- 0·11	25·1	—	32	—
	Hastings (St. Leonards)	63	38	61·0	51·7	56·2	+ 3·1	99	0	6	0·72	- 0·06	24·6	- 6·2	32	- 8
	Southampton	67	41	62·3	51·8	56·9	+ 4·4	104	0	7	2·09	+ 1·35	19·6	- 9·6	25	- 12
	Portland Bill	63	49	59·6	54·6	57·0	+ 4·4	105	0	7	1·72	—	*	*	*	*
	Shaftesbury Ⓜ	66	40	63·2	49·0	55·9	+ 6·1	97	9	7	1·33	+ 0·50	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	56	35	52·5	42·8	47·5	- 1·5	39	0	6	3·72	+ 2·09	*	*	*	*
	Glasgow	56	36	51·1	42·9	46·9	- 1·3	34	0	6	2·60	+ 1·76	6·8	- 10·9	9	- 14
	Cally Ⓢ	58	30	55·0	42·5	48·6	+ 0·4	46	0	6	1·48	+ 0·43	*	*	*	*
	Aspatria	58	32	54·3	42·2	48·1	- 1·5	43	0	7	3·34	—	17·8	—	23	—
	Douglas (Isle of Man)	59	40	56·3	48·7	52·4	+ 2·6	73	0	7	2·32	+ 1·35	18·9	- 7·1	25	- 9
7. ENGLAND, N.W.	Newton Rigg	58	29	53·1	42·8	47·8	- 0·2	41	0	7	2·87	—	16·2	—	21	—
	Stonyhurst	58	35	54·2	45·6	49·8	+ 0·5	55	0	7	2·26	+ 1·11	19·6	- 2·8	26	- 4
	Blackpool Ⓜ	61	38	57·0	48·1	52·4	+ 1·8	73	0	7	1·62	+ 0·69	23·6	+ 0·9	31	+ 1
	Manchester (Prestwich)	62	34	57·4	45·6	51·3	+ 1·8	65	0	7	1·50	+ 0·59	12·7	—	17	—
	Liverpool Obsy. (Bidston)	62	45	56·4	49·4	52·8	+ 1·7	76	0	6	1·38	+ 0·61	14·7	—	19	—
	Chester (Hawarden Bridge)	67	41	59·3	47·9	53·4	+ 2·2	80	0	6	1·92	—	*	*	*	*
	Llandudno Ⓜ	62	47	58·1	50·7	54·3	+ 1·9	86	0	7	1·43	+ 0·57	20·9	- 1·5	27	- 2
	Holyhead	60	47	57·7	50·4	53·9	+ 1·8	83	0	7	1·21	+ 0·30	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	61	48	58·6	52·6	55·5	+ 2·6	95	0	7	1·73	+ 0·86	19·9	- 6·7	26	- 9
	Clifton	64	45	59·9	52·2	55·9	+ 4·6	97	0	6	2·31	+ 1·47	*	*	*	*
	Bath	65	41	61·6	51·0	56·1	+ 4·9	99	0	5	1·44	+ 0·72	18·3	—	24	—
	Arlington (N. Devon)	61	41	57·7	49·0	53·2	+ 2·5	78	0	7	3·03	+ 1·68	*	*	*	*
	Cullompton Ⓜ	65	40	61·8	50·3	55·9	+ 5·3	97	0	7	1·93	+ 1·08	16·7	- 8·2	21	- 11
	Falmouth	62	45	59·2	52·1	55·6	+ 2·3	95	0	7	2·18	+ 1·06	16·3	- 13·1	21	- 17
	Plymouth	64	45	60·1	52·2	56·0	+ 3·5	98	0	7	1·98	+ 1·15	17·7	- 10·0	23	- 13
9. IRELAND, N.	Malin Head	58	45	53·4	47·6	50·4	- 0·1	59	0	7	3·22	+ 2·52	*	*	*	*
	Edenfel (Omagh)	60	36	55·3	45·4	50·2	+ 2·3	57	0	7	2·17	+ 1·31	*	*	*	*
	Blacksod Point	58	40	55·7	48·0	51·7	+ 0·2	68	0	7	1·19	+ 0·06	*	*	*	*
	Markree Castle	61	35	57·0	42·6	49·6	+ 0·5	53	0	7	2·25	+ 1·52	21·1	- 0·4	27	- 1
	Armagh	61	41	56·7	46·5	51·5	+ 2·6	67	0	7	1·48	+ 0·82	23·3	+ 1·0	30	+ 1
	Donaghadee	61	44	56·3	47·3	51·7	+ 1·5	68	0	7	1·69	+ 1·01	*	*	*	*
10. IRELAND, S.	Dublin	65	40	59·8	48·1	53·8	+ 2·6	83	0	5	0·93	+ 0·30	31·2	+ 3·9	41	+ 5
	Birr Castle	62	36	57·6	44·4	50·3	+ 1·3	62	0	6	1·02	+ 0·34	21·9	- 2·9	28	- 4
	Kilkenny	63	33	58·6	44·1	51·1	+ 0·9	64	0	6	1·26	+ 0·57	*	*	*	*
	Waterford	61	36	58·7	46·9	52·6	+ 1·9	74	0	5	1·54	+ 0·67	*	*	*	*
	Roche's Point	60	37	58·6	48·6	53·5	+ 0·9	81	0	6	1·98	+ 1·06	*	*	*	*
	Valencia	61	40	58·4	47·3	52·7	0·0	75	0	7	1·64	+ 0·44	22·9	- 2·8	30	- 4
	Killarney	65	39	63·2	46·5	54·6	+ 3·0	88	0	6	1·55	+ 0·39	*	*	*	*
	Foynes	62	41	57·6	46·8	52·0	+ 1·2	70	0	5	0·91	+ 0·09	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	63	50	60·1	53·4	56·7	+ 1·8	103	0	7	1·96	+ 1·15	15·6	- 14·2	20	- 18
	Jersey	66	50	63·3	55·4	59·2	+ 3·9	126	0	7	1·10	+ 0·16	22·6	- 10·0	29	- 13

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

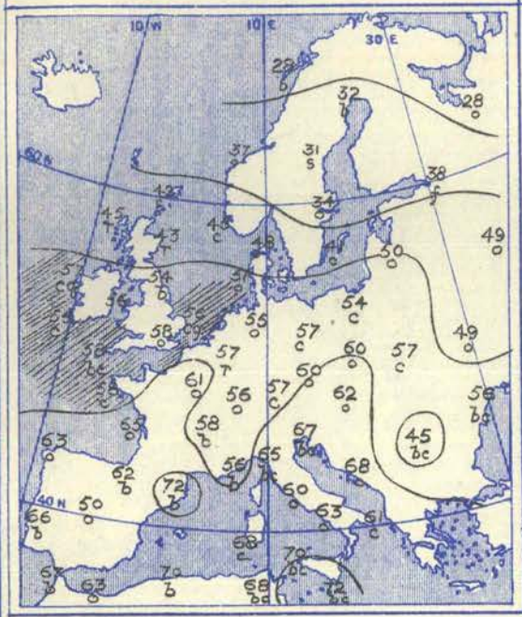
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

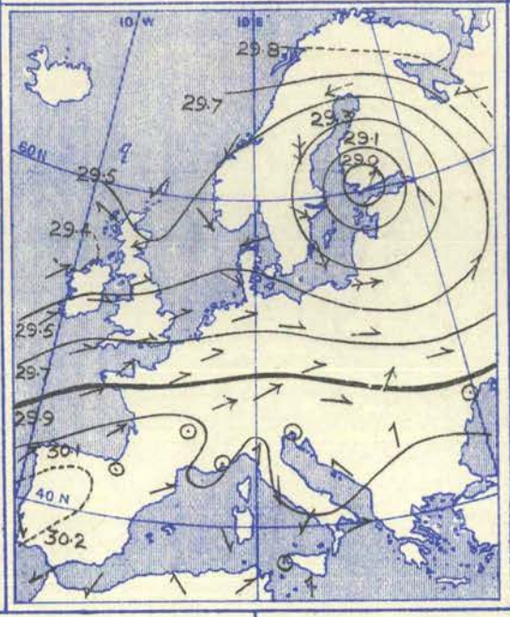
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea and those entered to Liverpool at Hoylake.

Sunday, 4th October, 1903.

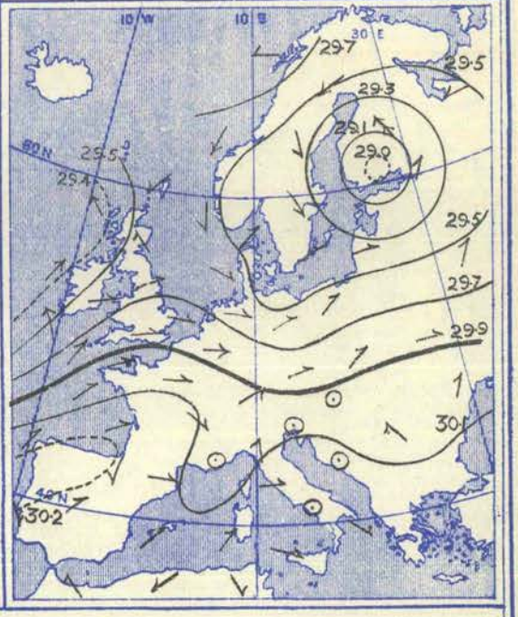
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in the extreme north of Scandinavia and the most southern countries only; cloudy or dull elsewhere, with steady rain in Scotland and at Jersey and over the Netherlands, and some showers in Ireland. Snow falling at Hernösand. Snow at other northern stations later, and rain becoming general over the northern half of Europe. Largest amount, 1·2 ins. at Stornoway.

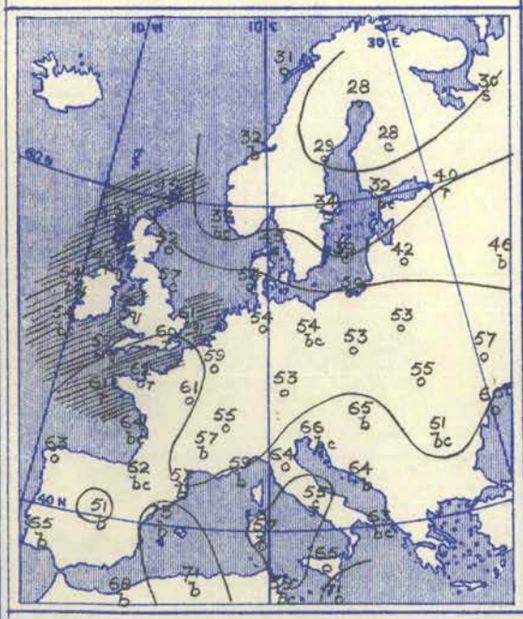
Temperature fallen irregularly. Morning readings ranging from 72° at Malta and Barcelona, 70° at Palermo, 67° at Trieste, and 66° at Lisbon, to 59° at Dungeness, 40° at Nairn, to below 40° in most northern regions of the Continent, and to 28° at Bödo and Archangel. Maxima during day 65° in London, 66° at St. Petersburg, above 70° over the southern countries generally, and to about 80° in a few places. Not as high as 40° in the major portion of Scandinavia and Finland, and below 50° in the Shetlands and at Wick.

Wind at 8 a.m. circulating cyclonically with the force of a gale around the south-west of Finland, and showing a partial circulation of moderate to strong winds over our own north-western and western coasts. Light and mainly anticyclonic airs prevailing over southern Europe and the Mediterranean. Very little change taking place later, but a veering to South-South-East setting in at Valencia.

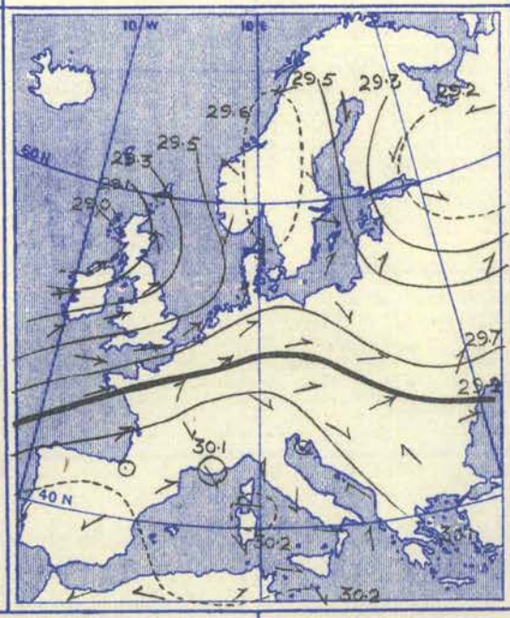
Barometer in morning ranging from above 30·2 ins. in an anticyclone over the Spanish Peninsula, and above 30·1 ins. over the southern countries generally, to 29·4 ins. and less in a depression off the north-west of Ireland, to a little lower in a secondary over the south-west of Norway, and to below 29·0 ins. in an extensive and deep disturbance having its centre near Hangö. Latter system travelling very slowly eastwards later, and Norwegian secondary apparently moving south-eastwards. Irish disturbance moving slowly northwards, but another system approaching the south-west of that country.

Monday, 5th October, 1903.

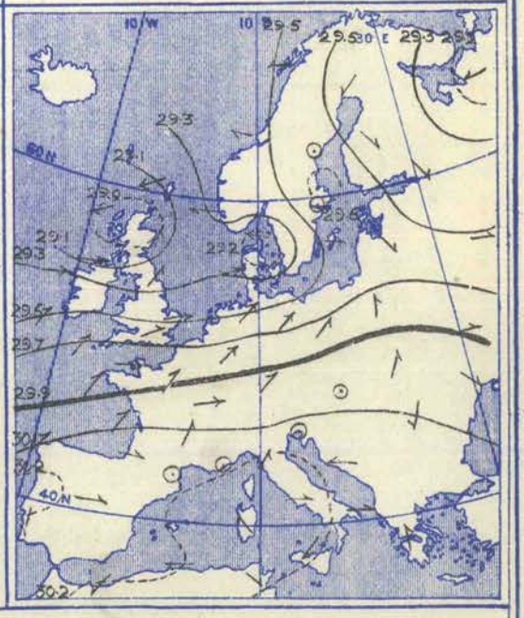
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull as a whole, with rain in many parts of the United Kingdom and Brittany, and fog at Rome and Pesaro. Fine and bright at many stations bordering the Mediterranean. Rain experienced later throughout these Islands, the north of France, the Netherlands, Germany, and in many parts of Scandinavia and Russia. Largest amounts, 0·8 in. at the Helder, Faerder, and Roche's Point, and 1·1 ins. at Hamburg. A thunderstorm occurring at Münster.

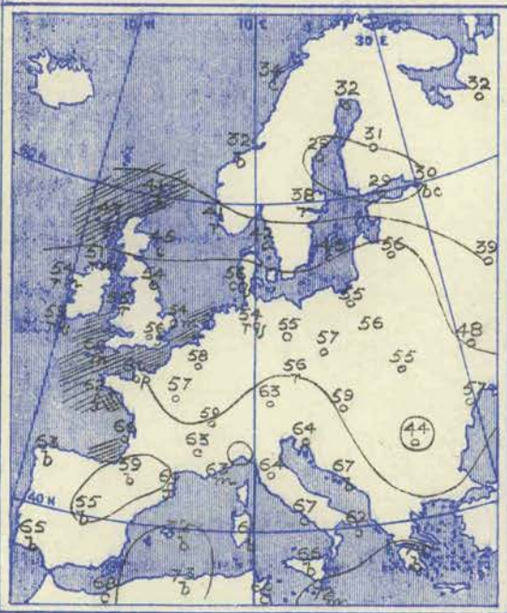
Temperature fallen generally, but risen in some parts of the British Isles. Readings at 8 a.m. ranging from 73° at Barcelona, 71° at Algiers, 70° at Leghorn, 66° at Trieste, and 62° at Dungeness, to below 40° over Scandinavia and the northern half of Russia, and to below 30° at some Swedish and Finnish stations. Rising later to 62° in the south of England, to 66° at Munich and Carlsruhe, to above 70° in most parts of the southern countries, and to above 80° in several localities. Highest reading, 86° at San Fernando.

Wind strong to a moderate or fresh gale from the South-Westward over Ireland and England, and from the South-Eastward in Scotland. A separate cyclonic circulation of moderate winds shown over northern Russia, and light variable airs prevailing over the Mediterranean and its vicinity. Not much change later as a whole, but wind backing to the North-Eastward in the north of Scotland, and a cyclonic movement of strong winds or gales setting in over Denmark.

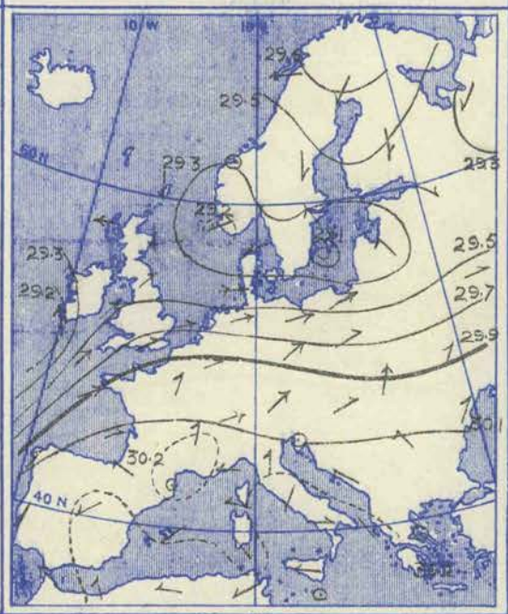
Barometer at 8 a.m. ranging from 30·1 ins. to 30·2 ins. over the whole of southern and south-western Europe and the Mediterranean, and from 29·6 ins. and upwards in a feeble anticyclone over Norway, to 29·2 ins. and less in a shallow depression in the north of Russia, and to below 29·0 ins. in a deeper system having its centre off the north of Scotland. Latter minimum moving east-north-eastwards by evening, and a well-formed and deep depression appearing over the north of Denmark. Russian disturbance travelling away eastwards.

Tuesday, 6th October, 1903.

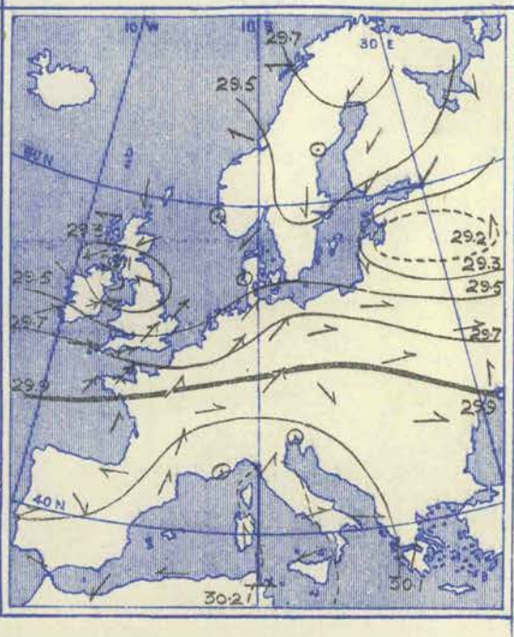
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning continuing fine on most shores of the Mediterranean, but very changeable and unsettled over Europe as a whole, with rain in many places. Rain falling during the ensuing twenty-four hours over the northern countries generally—more than an inch at Münster and an inch and a half at Malin Head.

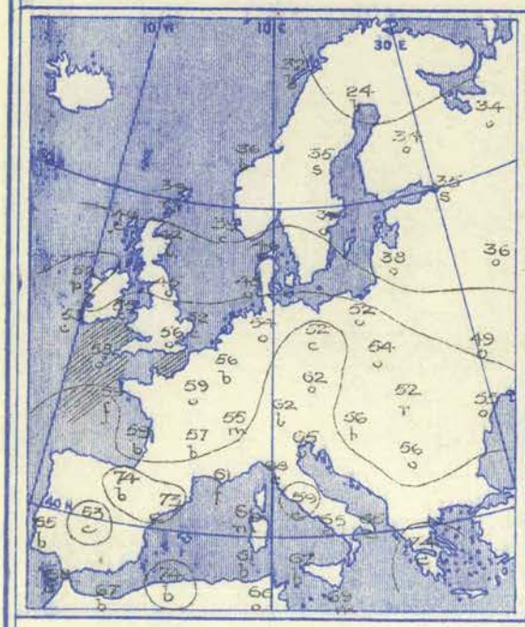
Temperature changed very irregularly. Morning readings ranging from 73° at San Fernando and Algiers, and 72° at Palma, Malta, and Athens to 53° at Dungeness and Valencia Island, to below 50° in Scotland, to below 40° in most northern parts of the Continent, and to 29° at Hernösand. Rising subsequently to 64° at Nottingham, to a few degrees higher at some German stations, to between 70° and 80° over southern Europe generally, and to 80° or rather higher in places. Maximum at St. Petersburg only 36°.

Wind at 8 a.m. showing two complete cyclonic circulations over northern Europe and a partial one over Ireland and England. The Westerly winds over the Baltic blowing strongly or with gale force, and the Southerly current on our south-west coasts increasing quickly in force. Light variable airs still prevailing in the southern regions. Severe gales felt later throughout England and the south of Ireland. Gales subsiding in the Baltic.

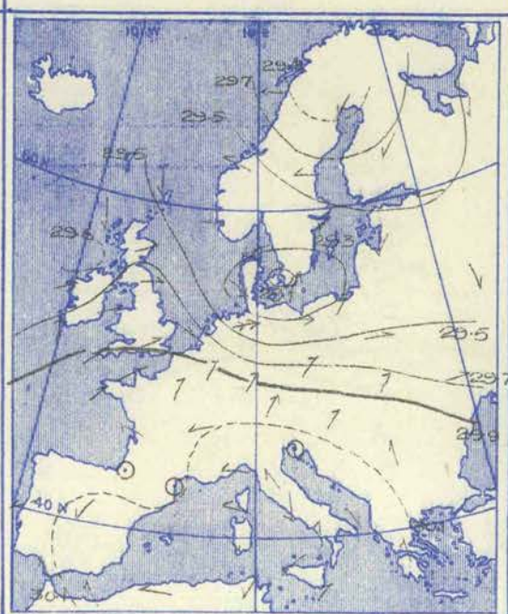
Barometer in morning ranging from above 30·2 ins. in the extreme north of Russia to 29·1 ins. and less in a complex system over the south of Scandinavia and the Baltic, and to less than 29·2 ins. in a deep depression approaching the south-west of Ireland. All cyclonic systems travelling in an easterly direction later, and that from the Atlantic proving to be very deep. Gradients for Westerly winds becoming unusually steep over all our more southern districts.

Wednesday, 7th October, 1903.

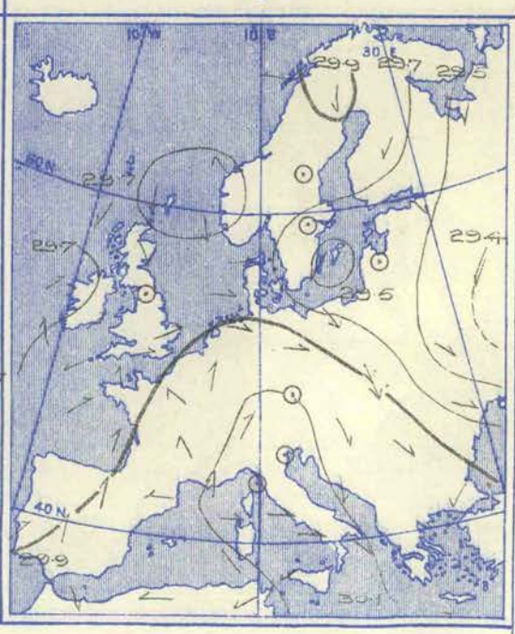
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in Lapland and at some stations in the southern countries; cloudy or dull elsewhere, with rain showers in Ireland, hail or sleet in the north-east of Scotland, steady rain in the Skager Rack, and snow at St. Petersburg and Hernösand. Fog prevailing on the west coast of Brittany. Rain general later in our Islands, the north of France, Denmark, and Scandinavia, but weather continuing dry over southern Europe. A thunderstorm occurring at Donaghadee during the night.

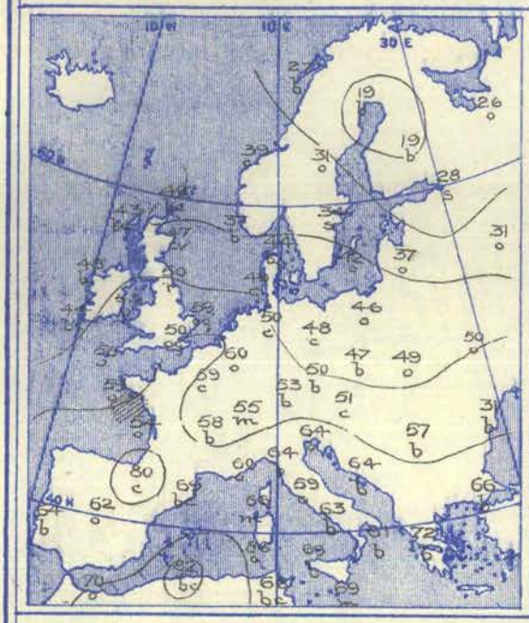
Temperature fallen in most regions. Morning readings ranging from 74° at Athens and Algiers, 73° at Barcelona, 69° at Malta, and 68° at San Fernando to 62° at Berlin, to below 50° in the northern countries generally, to below 40° at some Scotch stations and in Scandinavia and northern Russia, and to 24° at Haparanda. Rising during day to 90° at Biarritz, 88° at Madrid, to between 70° and 80° in most other southern localities, to 70° in Germany, 65° at Dungeness, and to 60° in the south of Ireland. Maximum at St. Petersburg only 37°. Sharp frost over Caithness during night.

Wind at 8 a.m. circulating cyclonically around Denmark, and the Westerly current blowing a moderate to fresh gale. Moderate breezes prevailing over our Islands—Westerly in England, Northerly in the north of Scotland, and South-Westerly in the north of Ireland. Light and rather variable anticyclonic airs in the south and over the Mediterranean. Gales subsiding later, and wind falling light and backing over England and France.

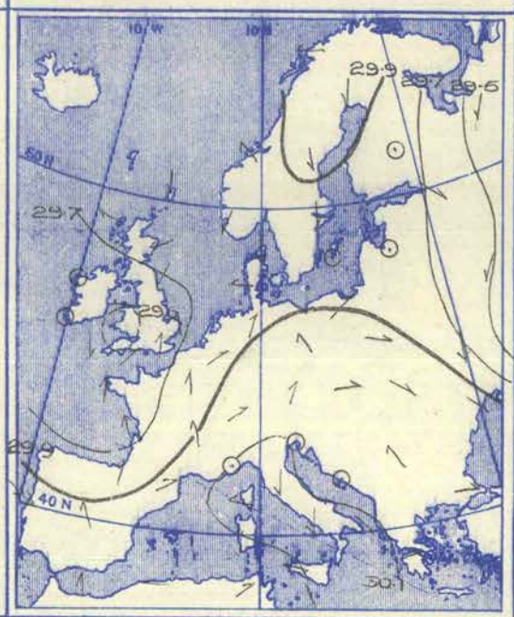
Barometer in morning ranging from 30·1 ins. in most southern regions and from 29·8 ins. and above in Lapland to 29·6 ins. and less off the north-west of Ireland, to 29·3 ins. and less over central Russia, and to below 29·1 ins. in a depression having its centre near Copenhagen. Fresh disturbances appearing over the Bay of Biscay by evening and pressure giving way generally over south-western Europe. Both Danish and Russian depressions travelling eastwards.

Thursday, 8th October, 1903.

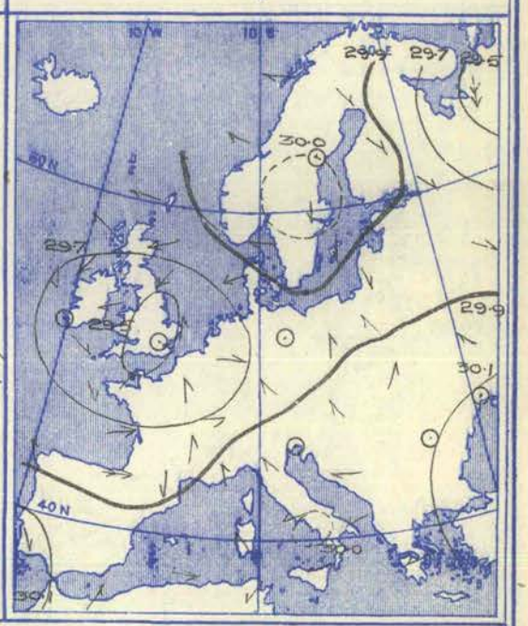
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine and bright in Lapland and in a few of the most southern regions, and also at several stations in central Europe. Cloudy or overcast generally, with rain over the northern and eastern counties of England, the south of Scotland, and the north-east of France, and showers at Malin Head and Holyhead. Fog prevailing over central and southern Ireland; snow falling at Hernösand and in the Gulf of Finland. Continuous rain all day in most parts of Great Britain. Very heavy in north-east. No less than 2·58 ins. at North Shields. A thunderstorm at Dungeness at night.

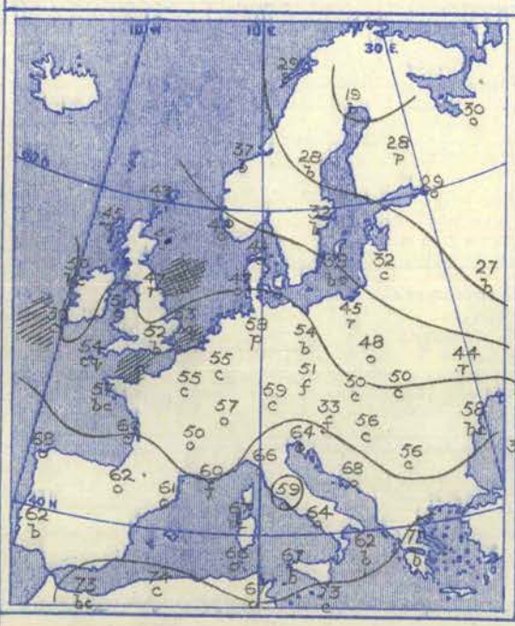
Temperature fallen decidedly generally, but risen over France and in most parts of Great Britain. Readings at 8 a.m. highest, 82° at Algiers, 80° at Biarritz, 72° at Patras, and 69° at Malta and Barcelona. Lowest, (1) 19° at Haparanda, 28° at St. Petersburg, and 31° at Moscow, (2) 32° at Wick, (3) 44° at Valencia Island. Rising later to 63° in London, to about 80° at some French and other southern stations, and to a little above 80° in Greece and Algeria.

Wind in morning light and anticyclonic over all the central and southern and northern countries, but cyclonic circulations of moderate to fresh winds prevailing around England and the Bay of Biscay. A fresh Westerly gale blowing at Lisbon. Wind increasing from the Eastward in Scotland during day, and a Westerly gale setting in at Biarritz, and a Northerly gale at Archangel.

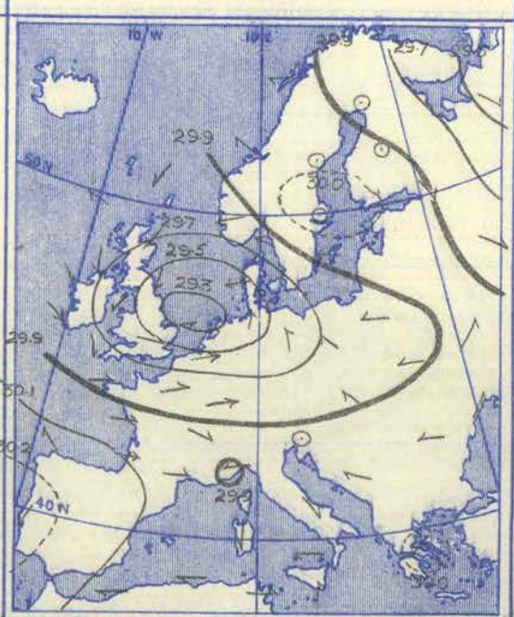
Barometer at 8 a.m. ranging from 30·0 ins. to 30·2 ins. in a large area covering the greater part of central and southern Europe, and from 29·9 ins. and upwards over the north of Scandinavia, to less than 29·5 ins. over the eastern half of Russia, to about 29·6 ins. over the Bay of Biscay, and to less than 29·6 ins. in a well-defined depression over Wales and the adjacent counties of England. Disturbance over our Islands moving eastwards later and growing deeper, and another system joining it from the Bay of Biscay. Barometer rising briskly over Spain and Portugal.

Friday, 9th October, 1903.

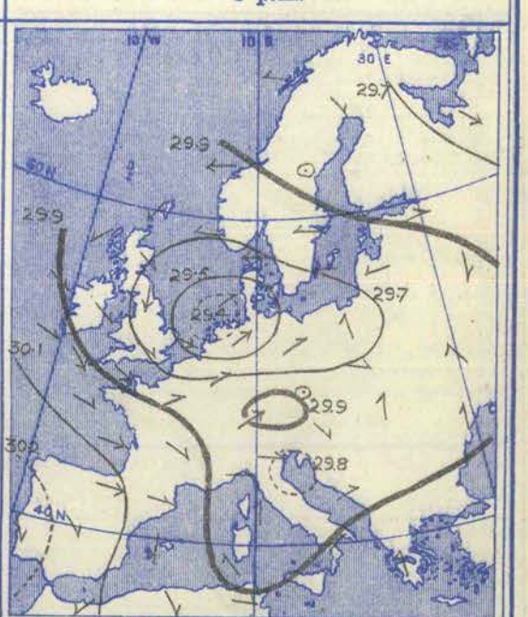
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in a few localities, but cloudy or overcast generally. Rainy at several of our own stations and on the shores of the Baltic, and snow falling at Bodö. Rain becoming very general during the ensuing twenty-four hours over the United Kingdom, Denmark, France, and central Europe, and also in the north of Italy.

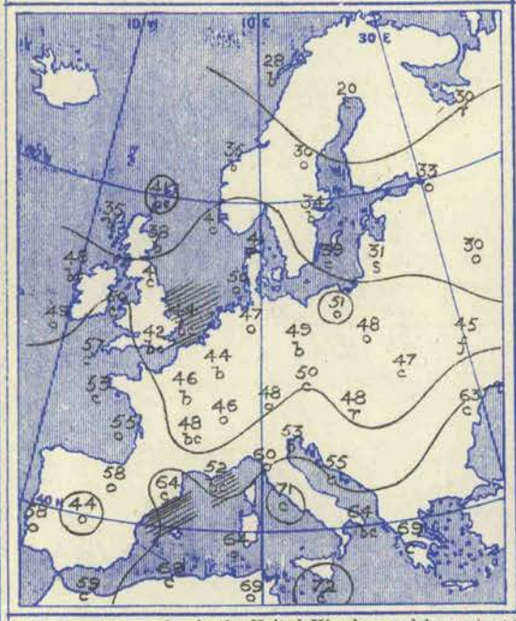
Temperature changed very irregularly. Readings at 8 a.m. ranging from 74° at Algiers, 73° at Malta, 71° at Athens, and 68° at Lésina and Coruna, to 43° at Nairn, 38° at Kharkov, 27° at Moscow, and to 19° at Haparanda. Maxima during day just exceeding 60° at some of our own southern stations, exceeding 70° on most of the shores of the Mediterranean, and 80° in Greece and on the Algerian coast. Maximum only 50° at Liverpool and 48° at North Shields.

Wind in morning light and variable in nearly all the southern regions, but showing a cyclonic circulation around the North Sea. Easterly current over Denmark blowing a gale, and the Northerly and Westerly winds over our Islands very strong in force. Increasing to gale force later on the coast of Yorkshire, but not much other change taking place.

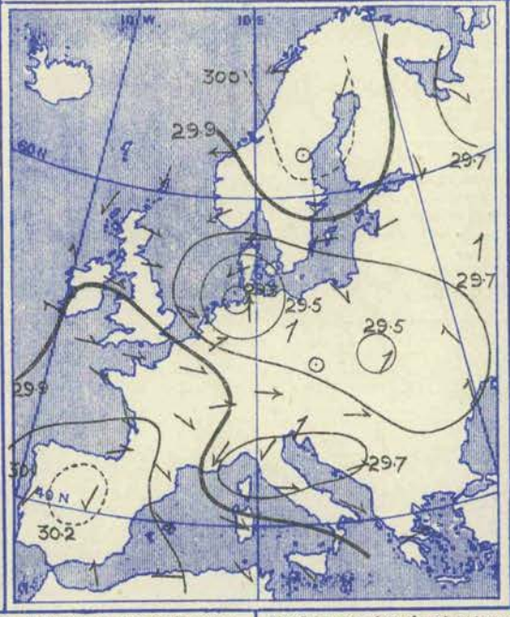
Barometer at 8 a.m. ranging from above 30·2 ins. over Portugal, and above 30·0 ins. over central Sweden, to about 29·1 ins. in a deep depression over the southern part of the North Sea. Latter system moving slowly eastwards during day, and barometer rising in its rear. High pressure over central Sweden giving way, and barometer falling briskly over central Europe and the Baltic.

Saturday, 10th October, 1903.

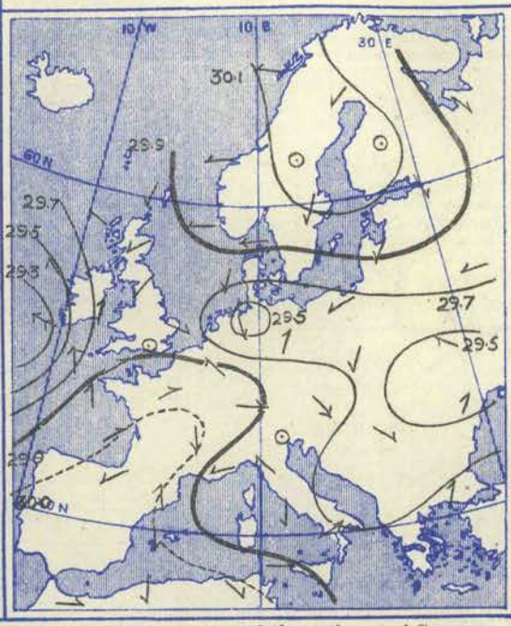
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in the United Kingdom and in most parts of France and Scandinavia; cloudy or dull in other regions, with rain in Austria, Denmark, and at Archangel, and snow at Riga. Continuing dry in Spain and Portugal, Algeria, and the south of France and Italy, but rain falling later in almost all other parts of our area—heavily in the south of Ireland and over Austria, and as much as 1·1 ins. at Patras. Very heavy snow—1·3 ins.—occurring at Hangö.

Temperature fallen generally. Morning readings ranging from 72° at Malta, and 69° at a few other stations in the extreme south, to 50° or below over all the central countries, 38° at Nottingham, 34° at Wick and Nairn, 30° at Moscow and Archangel, and to 20° at Uleaborg. No higher than 44° at Madrid. Rising to 60° during day at Pembroke and Dungeness, to 70° or a little higher in many southern regions, and to about 80° at Athens and Tunis. Maxima at Aberdeen and Shields only 50°.

Wind in morning showing two cyclonic circulations—one around the north-west of Germany and the other around the north of Italy and its neighbourhood. Fresh or strong in many localities, and blowing a gale from West-North-West on the Dutch coast. Moderate from the Southward or South-Eastward in the west of Ireland. Wind backing very generally over our Islands by evening, and increasing to a strong breeze or a gale from between South and South-East on our west and south-west coasts.

Barometer at 8 a.m. ranging from above 30·2 ins. over central Spain, and above 30·0 ins. in the north of Sweden, to 29·8 ins. off the south-west of Ireland, 29·7 ins. in the north-east of Russia, to less than 29·7 ins. in an elongated depression stretching across northern Italy, and to about 29·2 ins. in a small but deep centre of disturbance not far from the mouth of the Elbe. A large and deep depression approaching the south-west of Ireland later, and barometer falling over the whole of the United Kingdom and France. Gradients becoming steep in the south-west and west. German disturbance moving slowly eastwards and decreasing in depth.

IV.—GENERAL NOTES, etc.

During the whole of this week the barometer was highest in some part of southern Europe or the Mediterranean, but during the latter half of the time an area of only slightly lower readings lay over the extreme north of Europe. Depressions from the Atlantic which passed in an easterly or north-easterly direction over or near our Islands were very numerous and some of them of great size and rather deep, while other systems were developed in the neighbourhood of the Baltic. At the end of the period a rather deep and elongated disturbance had appeared over the northern parts of Italy. The cyclonic circulations of the wind over the United Kingdom and all the more north-western countries were very well defined and were usually of considerable force, and gales were of somewhat frequent occurrence. In all the southern regions, however, and also in the far north, the winds were mostly variable or anticyclonic and of little strength. A great deal of rain was experienced in the tracks of the depressions and their immediate vicinity, but over southern Europe, and on a few occasions over Scandinavia, the weather was dry. The heaviest fall of rain at any particular station occurred at Alnwick Castle, 2·68 inches being measured on Friday morning, and 0·43 inches on the following morning. Temperature remained fairly high except in the most northern regions, where sharp frost set in and continued for some days. The extreme north of Scotland was also visited by frost soon after the middle of the week, but this was very temporary.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 236.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	34·3	+ 14·3	45	+ 19
STRATHPEFFER SPA	17·2	− 5·3	23	− 7
EDINBURGH	14·8	− 5·1	20	− 7
COCKLE PARK	21·8	—	28	—
NEWCASTLE-ON-TYNE	20·0	—	26	—
YORK	17·7	− 4·0	23	− 5
CROMER	21·7	—	28	—
LOWESTOFT	20·8	—	27	—
DUNMOW	19·9	—	26	—
SHEFFIELD	18·4	—	24	—
WORKSOP	18·6	− 2·7	24	− 4
THURCASTON	16·6	− 5·9	22	− 8
TUNBRIDGE WELLS	23·0	—	30	—
MARGATE	21·2	− 6·1	28	− 8
BROADSTAIRS	21·7	—	28	—
RAMSGATE	—	—	—	—
EASTBOURNE	26·6	− 3·9	34	− 5
BRIGHTON	22·3	− 8·5	29	− 11
WORTHING	24·0	—	31	—
BOGNOR †	24·3†	—	31	—
WATERGATE PARK	19·5	—	25	—
WESTBOURNE †	23·2†	− 6·2	30†	− 8
VENTNOR HOSPITAL	23·1	− 8·4	30	− 11
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	17·9	− 7·1	23	− 9
SOUTHPORT	18·8	—	24	—
RHYL	21·4	—	28	—
ABERDOVEY †	23·1†	—	30†	—
TENBY	—	—	—	—
TORQUAY	20·6	− 7·9	26	− 10
NEWQUAY	14·4	−14·0	19	− 18
GUERNSEY †	21·6†	− 9·0	28†	− 12

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Vol. XX. - No. 30. - p. 176	Colly Weston	72	—	66·7	—	58·2	− 2·9	113	—	—	0·24	− 0·31	—	—	—	—
" - No. 31. - p. 182	N. Shields	—	48	—	51·6	58·4	+ 1·0	115	—	—	—	—	—	—	—	—
" - No. 32. - p. 188	Dungeness	—	54	—	57·0	61·4	− 0·3	136	—	—	—	—	—	—	—	—
" - No. 34. - p. 200	Leith	—	—	—	—	—	—	—	—	—	0·64	+ 0·07	—	—	—	—
" " "	Holyhead	—	—	—	52·4	56·4	− 1·9	101	—	—	—	—	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 41.] *Third Series.* WEEK ENDING SATURDAY, OCTOBER 17TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 242.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	56	34	50·1	42·3	46·1	0 (average)	29	− 5	0	− 9	1754	− 95	503	− 65
	1. SCOTLAND, EAST	60	33	52·4	41·5	46·8	1 above	36	− 1	1	−10	1993	−200	514	−101
	2. ENGLAND, N.E.	59	35	54·7	43·3	48·8	1 above	48	+ 5	0	− 5	2368*	− 18	342	−152
	3. ENGLAND, EAST	62	36	57·0	45·4	51·1	2 above	64	+15	0	− 6	2847	+ 81	322	−220
	4. MIDLAND COUNTIES	60	37	55·2	44·0	49·5	1 above	53	+ 8	0	− 8	2626	− 98	361	−197
	5. ENGLAND, SOUTH	63	41	58·2	48·6	53·3	3 above	79	+21	0	− 4	3014*	− 9	208	−190
Principal Grazing Districts.	6. SCOTLAND, WEST	58	37	54·2	43·6	48·8	1 above	48	+ 6	0	− 6	2282*	− 46	324	−106
	7. ENGLAND, N.W.	61	35	55·0	45·7	50·2	1 above	57	+10	0	− 4	2545	− 7	262	−137
	8. ENGLAND, S.W.	61	42	57·1	48·3	52·6	2 above	74	+17	0	− 3	2908*	+ 87	162	−145
	9. IRELAND, NORTH	61	39	53·8	44·2	48·9	1 above	48	+ 3	0	− 5	2357	− 99	286	− 76
	10. IRELAND, SOUTH	63	36	55·9	44·9	50·3	1 above	58	+ 5	0	− 4	2803	+ 22	183	− 77
	— CHANNEL ISLANDS	65	48	59·2	51·4	55·1	1 above	92	+14	0	0	3350	+ 93	49	− 68

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 242.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	28	16 more	205	+32	53·9	+17·5	8	−10	12	−14	961	− 69	25	− 2
	1. SCOTLAND, EAST	6	13	6 more	182	+31	32·5	+ 8·7	16	− 4	22	− 6	1074	−102	28	− 3
	2. ENGLAND, N.E.	5	12	5 more	154	+16	25·9	+ 6·6	20	− 4	27	− 5	1170	− 77	31	− 2
	3. ENGLAND, EAST	5	15	9 more	137	− 1	25·0	+ 6·4	25	− 1	34	− 1	1339*	− 91	36	− 2
	4. MIDLAND COUNTIES	6	21	15 more	150	+17	29·3	+ 7·9	24	+ 2	32	+ 3	1164	− 72	31	− 2
	5. ENGLAND, SOUTH	6	18	10 more	153*	+24	28·4*	+ 7·3	25	0	34	0	1414	− 28	38	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	6	24	12 more	187	+30	52·6	+15·6	19	0	25	0	1197	− 31	32	− 1
	7. ENGLAND, N.W.	6	18	9 more	176	+29	34·6	+ 8·5	19	− 1	25	− 1	1275	+ 61	34	+ 2
	8. ENGLAND, S.W.	6	24	14 more	169	+21	38·1	+ 9·3	24	0	32	0	1369	−108	37	− 3
	9. IRELAND, NORTH	7	16	7 more	208	+31	38·3	+10·9	18	− 3	24	− 4	1065	− 67	28	− 2
	10. IRELAND, SOUTH	6	12	3 more	188	+30	38·9	+ 8·7	22	− 2	30	− 3	1182	−109	31	− 3
	— CHANNEL ISLANDS	7	17	8 more	181	+31	28·8	+ 5·2	24	− 5	32	− 6	1600	−105	43	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was again very rainy in all districts, and the intervals of relatively clear sky were few and brief. Thunderstorms were experienced in many parts of England and also at a few Scotch stations.

Temperature was above the mean very generally, but only just equal to it in Scotland N. In the majority of the districts the excess was 1°, but in England S. it was as much as 3°. The highest of the maxima were recorded on the 12th, when they ranged from 65° in the Channel Islands to 59° in England N.E. and to 56° in Scotland N. The lowest of the minima, which were registered on the first day of the period, ranged from 33° in Scotland E. to 41° in England S., 42° in England S.W., and to 48° in the Channel Islands.

Rainfall was more than the mean in all districts, but the excess was relatively slight in Ireland S. In most districts the fall was between two and three times as large as the mean value. The heaviest fall for any one day, 2·61 ins., occurred at Glencarron, and the largest total for the week, 5·87 ins., at Laudale.

Bright Sunshine was just equal to the normal in England S. and S.W. and in Scotland W. and a little above it in the Midland Counties; in all other districts there was a deficit. The percentage of the possible duration ranged from 34 in England S. and E. to 22 in Scotland E. and to 12 in Scotland N.

Barometer and Wind. The centres of large and deep depressions passed north-north-eastwards over or outside our western and north-western districts, and several of their secondaries moved more directly over the Kingdom. The South-Easterly to South-Westerly winds accompanying the disturbances were generally fresh or strong, and at times increased to a gale in all parts of the Kingdom, but more frequently in the south-west and west than elsewhere. On Friday afternoon a deep depression, after having reached a position off the north of Scotland from the south-south-westward, travelled south-eastwards to the North Sea and began to fill up. As the baric rise in its rear, *i.e.*, on our northern and north-western coasts, was very rapid, the gradients became steep for North-Westerly winds, and moderate or fresh gales from that quarter were experienced on many parts of our western and south-western coasts.

307 | 70 90 Wy. & S. Ltd. 12 | 02

II.—DATA from which the SUMMARY on page 241 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	51	39	49·3	43·3	46·2	+ 0·3	29	0	7	1·52	+ 0·54	*	*	*	*
	Stornoway	56	34	50·7	40·7	45·6	− 0·3	31	4	7	2·72	+ 1·55	9·1	− 10·8	13	− 15
	Wick	52	34	50·4	41·4	45·8	− 0·6	29	2	7	1·15	+ 0·46	*	*	*	*
	Lairg Ⓢ	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Glencarron Ⓢ	55	39	48·3	41·6	44·9	− 0·4	22	1	6	5·13	+ 3·15	*	*	*	*
	Fort Augustus Ⓢ	53	39	50·1	42·2	46·0	− 0·6	28	0	7	2·46	+ 1·53	3·9	− 10·2	5	− 14
	Fort William	55	41	51·6	44·5	48·0	+ 0·5	42	0	5	3·79	+ 2·07	5·9	− 11·6	8	− 16
1. SCOTLAND, E.	Nairn	58	33	52·1	39·9	45·8	− 0·6	35	6	7	1·30	+ 0·75	*	*	*	*
	Aberdeen	54	38	51·7	43·7	47·6	+ 0·4	39	0	6	1·08	+ 0·41	13·1	− 9·7	18	− 14
	Braemar Ⓢ	53	36	48·6	39·2	43·8	+ 0·4	24	8	7	1·28	+ 0·40	*	*	*	*
	Ochtertyre Ⓢ	57	39	53·3	41·9	47·4	+ 0·7	38	0	7	2·39	+ 1·45	*	*	*	*
	Leith	60	38	55·4	43·1	49·1	+ 0·8	50	0	6	0·48	+ 0·02	*	*	*	*
	Marchmont Ⓢ	58	35	53·1	41·3	47·0	+ 1·1	38	2	4	1·21	+ 0·41	18·3	− 1·4	25	− 2
2. ENGLAND, N.E.	Alnwick Castle	57	35	53·6	42·1	47·7	+ 0·4	40	0	5	1·01	+ 0·27	*	*	*	*
	Durham	58	37	53·0	42·3	47·5	+ 0·2	39	0	6	0·98	+ 0·29	16·4	− 4·2	22	− 6
	Shields	59	38	55·3	43·1	49·0	+ 0·8	49	0	6	0·84	+ 0·22	*	*	*	*
	Scarborough Ⓜ	59	41	55·0	43·7	49·2	+ 0·5	50	0	7	1·27	+ 0·54	19·3	—	26	—
	Spurn Head	57	41	55·1	44·9	49·9	0·0	55	0	4	1·34	+ 0·80	*	*	*	*
	Fulbeck (Lincolnshire)	59	40	56·1	43·4	49·6	+ 2·0	53	0	4	1·69	+ 1·13	26·6	—	36	—
3. ENGLAND, E.	Hillington Ⓜ	60	36	56·3	45·1	50·5	+ 1·8	60	0	4	2·36	+ 1·72	26·1	+ 3·4	35	+ 5
	Yarmouth	59	40	56·7	44·4	50·4	+ 0·6	59	0	6	1·28	+ 0·62	*	*	*	*
	Geldeston	60	36	57·1	44·8	50·8	+ 1·2	62	0	5	1·22	+ 0·62	24·2	- 1·8	33	− 2
	Cambridge	62	39	57·6	44·4	50·8	+ 1·7	62	0	6	1·35	+ 0·81	22·8	- 1·9	31	− 3
	Felixstowe	59	40	57·1	44·7	50·7	+ 1·1	61	0	4	1·31	—	31·3†	—	42†	—
	Rothamsted	60	42	55·9	45·3	50·4	+ 2·1	59	0	6	2·00	+ 1·33	22·2	- 3·3	30	− 5
	Shoeburyness	61	45	58·4	49·4	53·8	+ 3·5	83	0	3	1·09	+ 0·58	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	56	39	53·8	42·2	47·8	+ 0·6	41	0	6	2·09	+ 1·34	18·0	—	25	—
	Bawtry (Hesley Hall)	57	40	55·0	43·3	49·0	+ 1·3	49	0	4	1·77	+ 1·15	*	*	*	*
	Nottingham	60	38	56·1	43·7	49·7	+ 1·4	54	0	6	2·18	+ 1·59	26·3	—	36	—
	Loughborough	60	41	56·4	44·7	50·4	+ 1·7	59	0	5	2·11	+ 1·50	*	*	*	*
	Colly Weston (Stamford)	59	40	55·7	44·4	49·9	+ 1·2	55	0	7	2·19	+ 1·59	*	*	*	*
	Cheadle Ⓜ	59	37	53·7	42·6	48·0	+ 0·9	42	0	6	1·77	+ 1·01	*	*	*	*
	Birmingham (Edgbaston)	58	40	54·5	44·5	49·4	+ 1·0	52	0	6	2·61	+ 1·96	23·6	—	32	—
	Hereford Ⓜ	58	38	55·3	44·9	50·0	+ 1·5	56	0	6	2·61	+ 1·97	*	*	*	*
	Cirencester	57	38	55·3	43·4	49·2	+ 1·4	50	0	6	2·14	+ 1·42	25·1	+ 1·3	34	+ 2
	Oxford	60	43	56·4	46·3	51·2	+ 1·9	64	0	6	1·81	+ 1·19	25·4	+ 1·5	34	+ 2
5. ENGLAND, S.	London	63	42	58·0	46·7	52·2	+ 2·1	71	0	6	1·39	+ 0·79	21·4‡	+ 3·0‡	29‡	+ 4‡
	Swarraton (Alresford) Ⓜ	60	41	56·4	48·7	52·4	+ 4·2	73	0	5	2·61	+ 1·84	*	*	*	*
	Dungeness	61	44	59·1	50·4	54·6	+ 2·9	88	0	6	0·99	+ 0·26	25·3	—	34	—
	Hastings (St. Leonards)	61	44	57·7	48·9	53·2	+ 1·8	78	0	6	0·97	+ 0·14	23·8	- 4·6	32	− 6
	Southampton	63	43	59·6	48·5	53·9	+ 2·7	83	0	6	2·99	+ 2·24	26·9	+ 0·3	36	0
	Portland Bill	60	48	57·7	50·4	53·9	+ 2·6	83	0	6	1·23	—	*	*	*	*
	Shaftesbury Ⓜ	60	42	58·9	46·8	52·7	+ 4·5	75	0	7	2·14	+ 1·30	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	55	37	53·5	40·1	46·6	− 1·1	40	5	7	5·87	+ 4·24	*	*	*	*
	Glasgow	56	41	52·3	43·9	48·0	+ 1·2	42	0	6	1·87	+ 1·04	14·9	− 1·4	20	− 2
	Cally Ⓢ	58	40	55·8	42·1	48·8	+ 1·7	48	0	4	1·45	+ 0·38	*	*	*	*
	Aspatria	58	43	54·1	44·8	49·3	+ 1·4	51	0	6	1·26	—	14·9	—	20	—
	Douglas (Isle of Man)	58	45	55·4	47·3	51·2	+ 2·7	64	0	7	1·36	+ 0·36	25·8	+ 1·8	35	+ 2
7. ENGLAND, N.W.	Newton Rigg	57	35	53·2	41·7	47·3	+ 0·7	38	1	6	1·52	—	16·5	—	23	—
	Stonyhurst	56	42	52·7	44·6	48·5	+ 0·9	46	0	6	3·55	+ 2·41	16·0	- 4·6	22	− 6
	Blackpool Ⓜ	60	43	55·8	46·9	51·2	+ 2·0	64	0	6	1·96	+ 1·02	23·0	+ 2·2	31	+ 3
	Manchester (Prestwich)	57	41	54·2	44·2	49·1	+ 1·1	50	0	6	2·34	+ 1·42	11·5	—	16	—
	Liverpool Obsy. (Bidston)	58	44	54·9	46·0	50·3	+ 0·7	58	0	7	1·31	+ 0·54	23·4	—	32	—
	Chester (Hawarden Bridge)	61	45	56·2	46·3	51·4	+ 1·6	66	0	6	1·01	—	*	*	*	*
	Llandudno Ⓜ	60	47	57·2	48·6	52·8	+ 2·1	76	0	6	0·93	+ 0·05	20·9	+ 0·6	28	+ 1
	Holyhead	60	45	55·7	46·9	51·2	+ 0·2	64	0	6	1·59	+ 0·64	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	60	47	57·9	50·7	54·2	+ 2·6	85	0	6	1·51	+ 0·59	23·6	- 0·7	32	− 1
	Clifton	60	43	56·4	48·4	52·3	+ 2·7	72	0	6	2·62	+ 1·77	*	*	*	*
	Bath	61	42	57·9	47·7	52·7	+ 3·2	75	0	7	2·74	+ 2·04	20·7	—	28	—
	Arlington (N. Devon)	60	42	55·3	45·0	50·0	+ 0·6	56	0	7	4·39	+ 3·00	*	*	*	*
	Cullompton Ⓜ	60	42	57·7	47·2	52·3	+ 3·4	72	0	7	1·90	+ 1·03	20·6	- 2·0	28	− 3
	Falmouth	60	46	56·6	48·9	52·6	+ 0·5	74	0	6	2·17	+ 1·00	27·8	+ 0·5	37	+ 1
	Plymouth	60	47	57·9	50·1	53·9	+ 2·6	83	0	6	1·24	+ 0·40	23·8	- 1·2	32	− 2
9. IRELAND, N.	Malin Head	59	43	52·7	45·7	49·1	− 0·3	50	0	7	2·09	+ 1·42	*	*	*	*
	Edenfel (Omagh)	58	39	52·6	42·9	47·6	+ 1·2	39	0	6	1·84	+ 0·98	*	*	*	*
	Blacksod Point	58	44	53·7	46·7	50·1	− 0·2	57	0	7	2·44	+ 1·27	*	*	*	*
	Markree Castle	59	40	54·5	43·4	48·8	+ 1·3	48	0	7	1·49	+ 0·54	15·6	− 4·8	21	− 7
	Armagh	61	41	55·1	44·3	49·5	+ 2·1	53	0	6	0·60	− 0·06	19·3	− 1·6	26	− 2
	Donaghadee	58	41	54·4	42·4	48·2	− 0·6	43	0	6	0·93	+ 0·23	*	*	*	*
10. IRELAND, S.	Dublin	61	42	56·5	45·8	51·0	+ 1·4	63	0	4	0·60	− 0·06	26·1	+ 0·6	35	+ 1
	Birr Castle	59	38	54·4	42·1	48·1	+ 0·3	43	0	6	1·35	+ 0·67	20·3	- 2·9	27	− 4
	Kilkenny	61	36	55·4	42·3	48·7	− 0·1	47	0	5	0·74	+ 0·04	*	*	*	*
	Waterford	61	41	56·9	45·0	50·8	+ 1·4	62	0	5	0·90	+ 0·02	*	*	*	*
	Roche's Point	60	41	55·6	45·9	50·6	− 0·8	60	0	6	1·01	+ 0·07	*	*	*	*
	Valencia	60	45	55·4	47·4	51·3	− 0·3	65	0	6	1·62	+ 0·38	19·4	- 4·6	26	− 6
	Killarney	63	43	57·5	46·1	51·6	+ 1·3	67	0	7	2·39	+ 1·14	*	*	*	*
	Foynes	60	42	55·2	44·8	49·9	+ 0·7	55	0	6	1·14	− 0·29	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	60	48	58·0	50·7	54·2	+ 0·5	85	0	6	1·80	+ 0·96	30·1	+ 3·1	40	+ 4
	Jersey	65	49	60·3	52·0	56·0	+ 2·1	98	0	7	1·66	+ 0·67	20·0	- 10·0	27	− 13

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

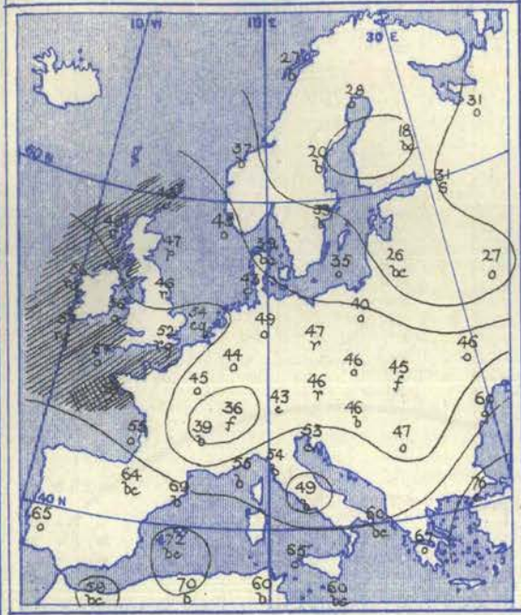
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

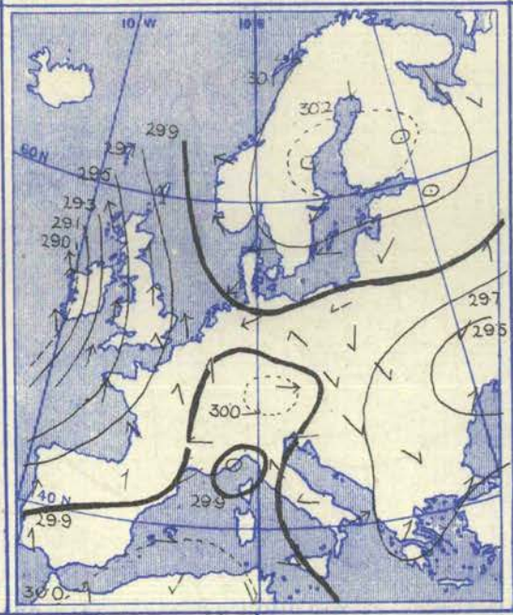
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 11th October, 1903.

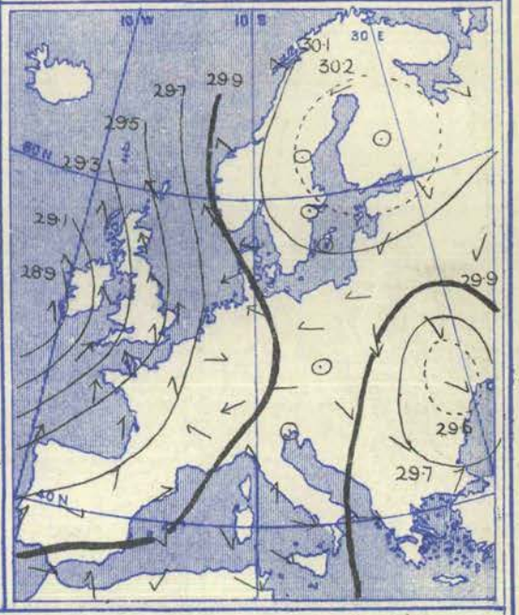
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Italy, Algeria, and the south of France, and at many stations in Scandinavia; cloudy or dull elsewhere, with rain over the whole of our Islands, Brittany, and in several parts of central Europe, and snow in the Gulf of Finland. Rain continuing all day throughout the United Kingdom and its immediate neighbourhood, considerable quantities falling in the south of Russia, and more than two inches at Constantinople.

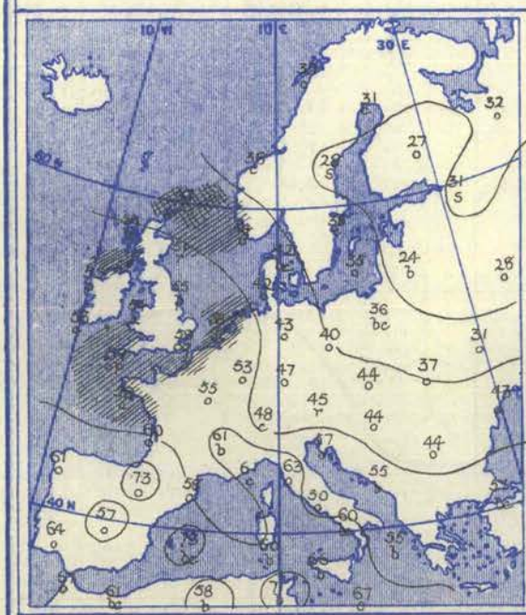
Temperature risen briskly in these Islands, fallen in most Continental regions. Morning readings ranging from 76° at Constantinople, 72° at Palma, 69° at Barcelona and Malta, and 67° at Athens, to a little below 60° on our south-west coasts, to below 50° over the major part of Europe, including many Italian stations, and to below 30° at most places in the far north. Lowest values, 20° at Hernösand and 18° at Kuopio. Maxima during day 60° at our own most southern stations, and 70° or above in most Mediterranean and extreme southern localities. Highest reading, 82° at Tunis.

Wind at 8 a.m. strong to a gale from South and South-East over these Islands and the west of France, and strong from the North-Eastward in Denmark. Light and anticyclonic over Scandinavia and northern Russia, and also in some parts of France and Germany. A complete circulation of light cyclonic winds prevailing over southern Russia. No general change occurring later, but South-Easterly wind increasing to a moderate or fresh gale along the east coasts of Great Britain and in the south-west of Norway.

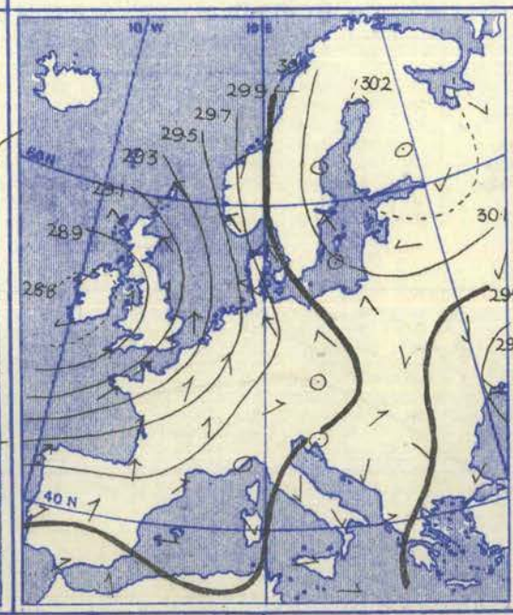
Barometer at 8 a.m. ranging from above 30·2 ins. in an anticyclone centred over Finland and the adjacent portion of Russia and Sweden, and 30·0 in a smaller area over Bavaria, Switzerland, and the east of France, to below 29·5 ins. in a shallow depression over Little and South Russia, and to 28·9 ins. in a large and deep disturbance off the west of Ireland. Latter system continuing to spread steadily eastwards later, and gradients increasing over all the western countries. Pressure giving way over central Europe.

Monday, 12th October, 1903.

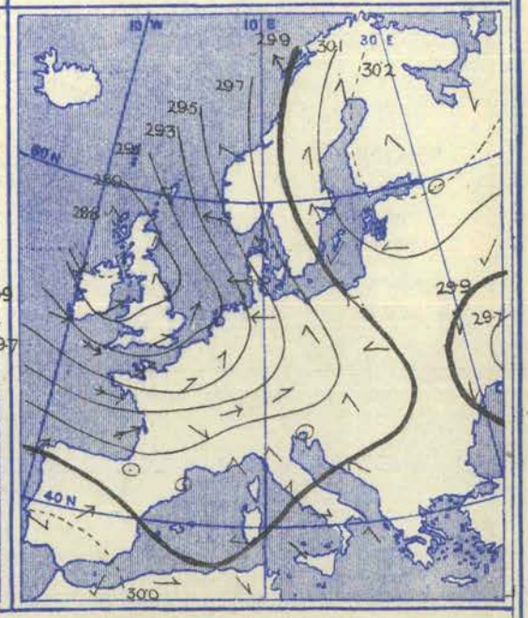
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fair and bright in Algeria and at the stations in the various isles of the Mediterranean, but dull in almost all other localities, with rain in most parts of the United Kingdom, the north of France, as well as at Memel and in central Europe. Snow falling at St. Petersburg and Hernösand. Very general rains later—1·0 in. at Cape Gris Nez, 1·2 ins. at Brussels, 0·8 in. at Belfort, 0·5 in. at Oxford. Continuing dry in Algeria and the south of Italy. Thunder heard at Paris.

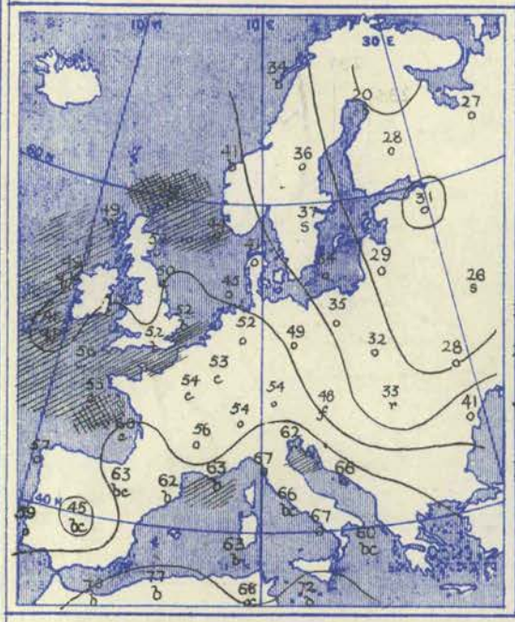
Temperature risen in France, Great Britain, and Scandinavia, fallen in most other localities. Morning readings highest, 82° at Alicante, 73° at Palma and Biarritz, 71° at La Calle, and 67° at Malta. Lowest, (1) 20° at Ulleaborg, (2) 24° at Riga, 28° at Moscow, 31° at Kiev, (3) 33° at Swinemünde, (4) 44° at Hermanstadt, (5) 50° at Florence. Rising subsequently to 63° in London, 65° at Jersey, to about 70° in many southern districts, to 84° at Palermo, and to 92° at Algiers and Tunis.

Wind in morning light and anticyclonic over both northern and southern Europe. A very extensive cyclonic circulation of considerable force shown around Ireland, the South-Easterly winds in Scotland, Denmark, and the south-west of Norway blowing a fresh gale, and the Easterly wind at Malin Head a moderate gale. Another cyclonic movement of light to strong winds prevailing over the south of Russia. Veering to the North-Westward or Westward on our own west and south coasts later, and also in the west of France; increasing to a strong gale in the latter district and to a fresh gale at Jersey.

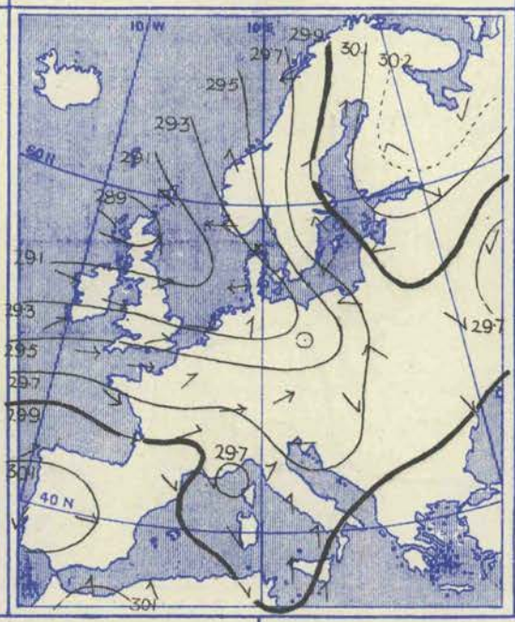
Barometer risen over the eastern half of our area, fallen in the west. Readings at 8 a.m. ranging from above 30·2 ins. in an anticyclone over Finland, above 30·0 ins. over Malta, Sicily, and the south of Italy, to less than 29·5 ins. in a depression over Little Russia, and to below 28·8 ins. in a large and deep disturbance having its centre over Ireland. Latter system moving northwards during day, and some small secondaries travelling eastwards across England. Gradients increasing over the Channel and the north of France.

Tuesday, 13th October, 1903.

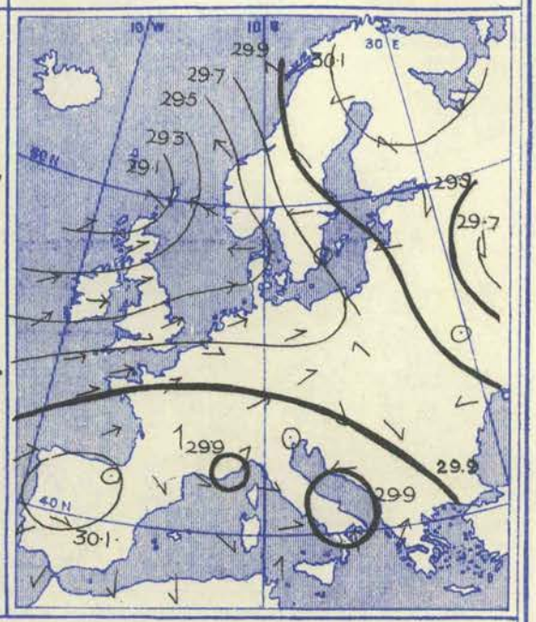
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull generally, but fine and bright in Algeria, and temporarily so in the south-east of England and at a few stations both over northern and southern Europe. Showery or rainy in most parts of the United Kingdom, Normandy, the northern parts of Germany and Italy, and at Lemberg, and snow falling at St. Petersburg. Some rain later over the greater part of our area, largest amounts 0·8 in. at Neu-fahrwasser and Faerder, and 1·5 ins. at Trieste.

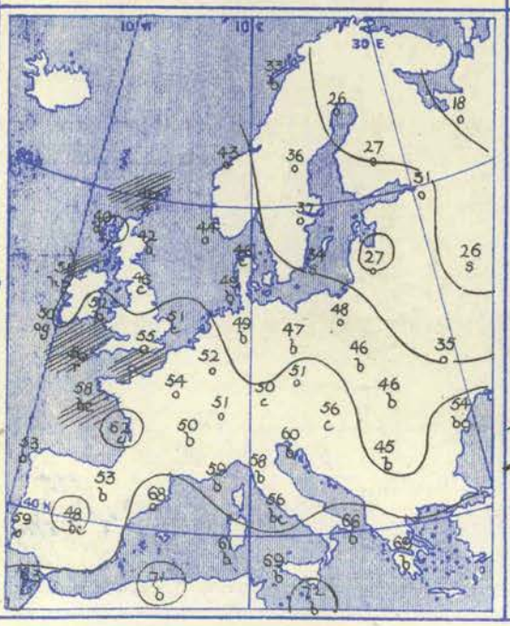
Temperature fallen except over Algeria, Italy, and central Europe, as well as over the Gulfs of Finland and Bothnia. Readings in morning highest, 77° at Algiers, 72° at Malta, 68° at Pesaro, and 67° at Naples. Lowest, (1) 20° at Uleaborg, (2) 37° at Karlstad, (3) 44° at Parsonstown, (4) 45° at Madrid. Rising later to 60° at Dungeness, to a few degrees higher over the major part of France and central Europe, and to between 70° and 80° in Italy and at most Spanish stations. Highest reading, 90° at Palermo.

Wind at 8 a.m. strong to a moderate gale from the Westward on nearly all our own coasts and fresh or strong to a whole gale from between South-East and East to the eastward of the North Sea and in the north of Scotland. Light and anticyclonic both in the extreme north-east and south-west of Europe, and fresh and irregularly cyclonic in the Mediterranean regions. Very little change later except some increase in force.

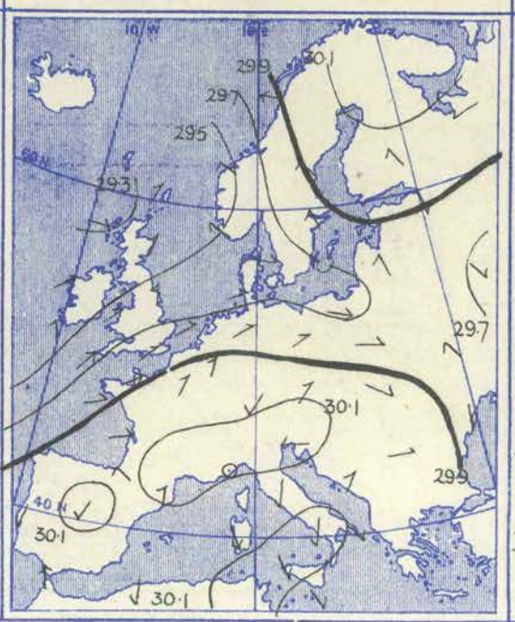
Barometer in morning ranging from above 30·2 ins. in Finland and the north of Russia and above 30·1 ins. over central Spain to below 29·7 ins. over central Russia and also in a small minimum near Nice, to about 28·8 ins. in a large and deep depression with its centre over the north of Scotland. Below 29·2 ins. in a secondary of a "V"-shaped character over Holland and the north-west of Germany. Scotch minimum moving slowly north-eastwards later and apparently becoming less deep. Gradients decreasing somewhat in almost all parts of our area.

Wednesday, 14th October, 1903.

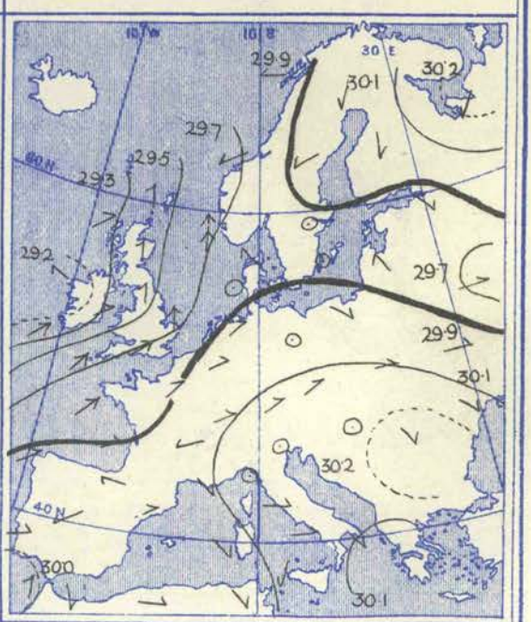
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. still cloudy or dull in most parts of our area, but fine in many parts of Scotland and on the shores of the Mediterranean. Rainy or showery on our own south-west coasts and at Memel, and snow falling at Wisby and Moscow. Rain later over the United Kingdom and the most north-western parts of the Continent—half an inch or more in the south-west of Norway and at many of our own stations, 0·9 in. at Stornoway and Nottingham, 1·0 in. at Blacksod, 1·1 ins. at Pembroke and Scilly, and 1·4 ins. at Ross (Hereford).

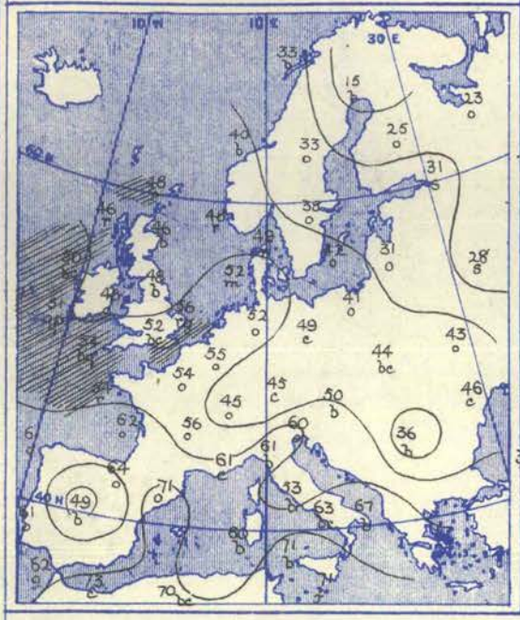
Temperature changed irregularly. Morning readings highest, 72° at Malta, 71° at Algiers, 69° at Athens, and 68° at Barcelona. Lowest, (1) 18° at Archangel, and below 32° over the greater part of Russia, Finland, and the north of Sweden, (2) 37° at Nairn, (3) 48° at Madrid, and (4) 50° at Lyons and Limoges. Rising during day to 60° at Dungeness, to above 70° in the south of France and other regions in the neighbourhood of the Mediterranean, and to 86° at San Fernando.

Wind at 8 a.m. moderate or fresh from South or South-West over the United Kingdom and from the South-Eastward or Eastward over Scandinavia. Light and anticyclonic airs prevalent in the central and southern regions generally, but a strong breeze from South-South-East blowing at San Fernando. Wind increasing from the South-Westward or Westward on our south-west and west coasts late in day or in the night, and from South or South-West in the north.

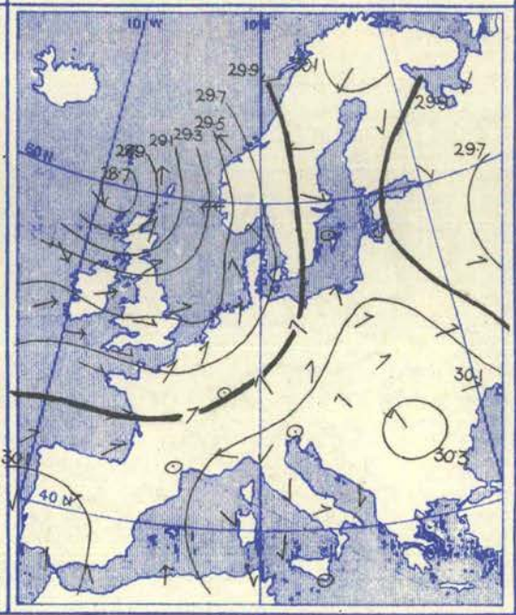
Barometer at 8 a.m. ranging from above 30·1 ins. over central Spain, Bavaria, and the south of France and the north of Italy and also over Lapland to 29·65 ins. at Moscow, 29·53 ins. in a secondary system at Skagen, and to 28·8 ins. and less in a large depression off the north-west of Scotland. Scotch depression moving away or dispersing later, but another system arriving over Ireland from the Atlantic. Barometer rising decidedly over south-eastern Europe and an anticyclone forming in that region.

Thursday, 15th October, 1903.

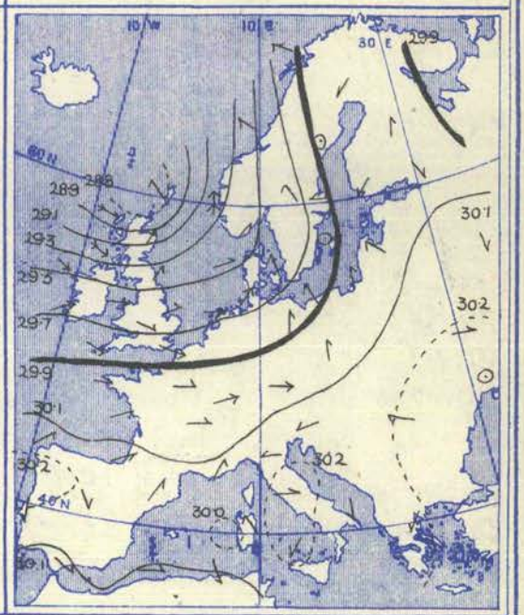
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in Lapland and many parts of southern Europe, and in several parts of our Islands. Cloudy or dull in almost all other localities, with showers or steady rain at some of our own stations, in Denmark and the south of Norway, and snow at St. Petersburg and Moscow. Rain later except in the most southern and central regions of Europe—largest amounts, 1·1 ins. at La Hague and Gap, and 2·1 ins. at Faerder. Thunderstorms occurring in several parts of England and France.

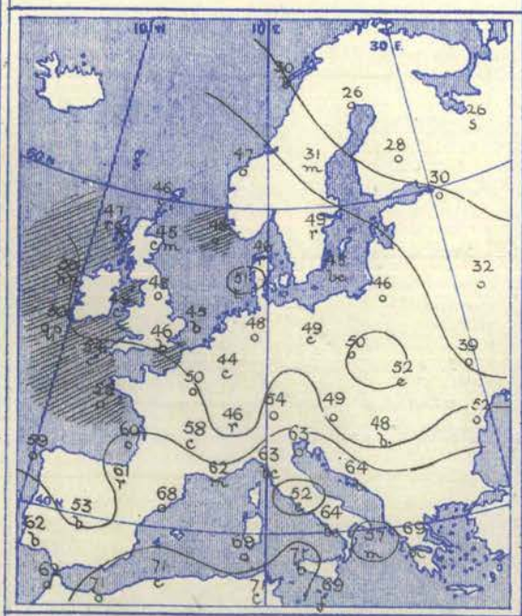
Temperature fallen in most regions. Morning readings highest, 73° at Oran, 71° at Barcelona, Palermo, and Malta, and 67° at Brindisi. Lowest, (1) 15° at Haparanda, 23° at Archangel, and 28° at Moscow, (2) 36° at Hermanstadt, (3) 49° at Madrid. Rising during day to 59° at Jersey and Dungeness, to between 60° and 70° over France and Austria, above 70° in Italy, to 81° at Patras, and to 82° at Algiers and Aumale.

Wind at 8 a.m. circulating cyclonically around the north of Scotland, the Westerly current over Ireland and England being strong to a gale, and the Easterly and South-Easterly winds on the eastern shores of the North Sea blowing a gale in the south-west of Norway. Light anticyclonic winds prevailing both over south-eastern and south-western Europe. Very little change later.

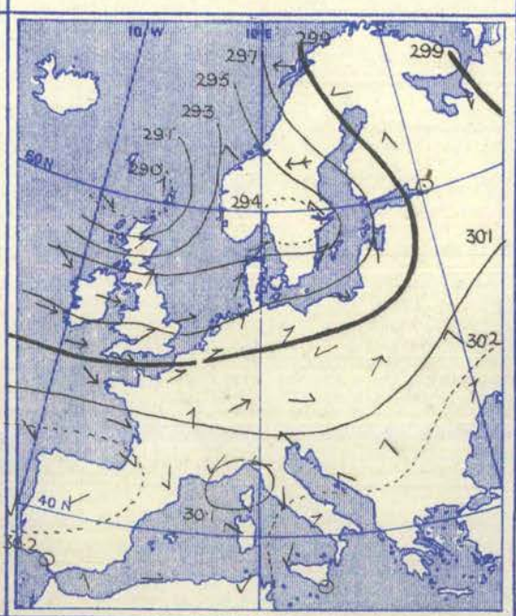
Barometer at 8 a.m. ranging from above 30·3 ins. in Transylvania, above 30·2 ins. over Portugal, and above 30·1 ins. in Lapland, to 29·7 ins. at Moscow, and to less than 28·7 ins. in a deep depression over the north of Scotland. Some small secondary disturbances shown over England and the North Sea. Scotch depression moving slowly north-eastwards later, and pressure recovering over the United Kingdom and France.

Friday, 16th October, 1903.

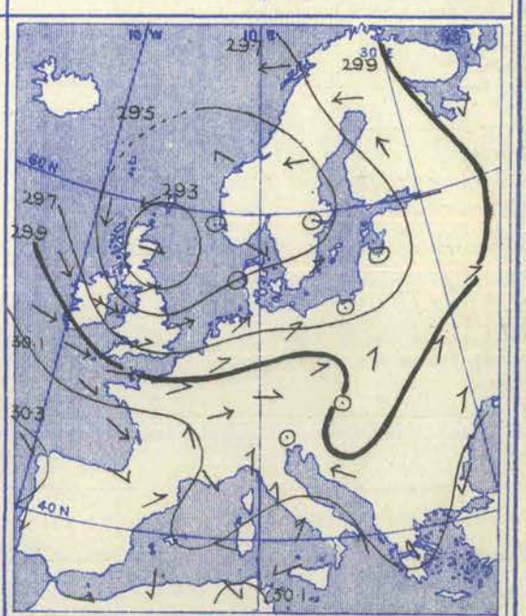
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over the Spanish Peninsula, south-eastern Europe, and in several parts of England; cloudy or dull elsewhere. Showery or rainy on our west and north-west coasts, at some French stations, and in various parts of northern Europe, as well as at Breslau; thunder at Fanö and snow at Archangel. Rain falling later in all except the most southern countries—heavily in many places—and a thunderstorm occurring at the mouth of the Elbe.

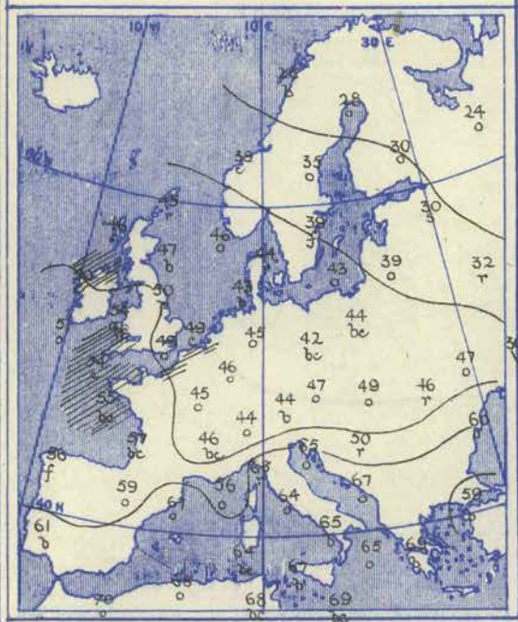
Temperature changed somewhat irregularly, but risen in most northern districts. Readings at 8 a.m. ranging from about 71° in Algeria, 69° at Patras, and 68° at Barcelona, to below 50° in most parts of our Islands and central Europe, and to below 30° in the north of Sweden and the north and south-east of Russia. No higher than 52° at Rome, and 53° at Madrid. Maxima during day just touching 58° on our south-east coast, but rising to 70° or above in most parts of southern Europe, to 81° at Patras, and to 88° at Tunis. Highest reading at Paris only 54°.

Wind light and anticyclonic over nearly all the southern regions. Showing two separate cyclonic circulations in the north—one around the north of Scotland and the other around the south of Sweden. Easterly wind strong to a gale over the north of Scandinavia, and the Westerly current blowing a fresh or strong breeze or moderate gale over our Islands. Wind veering to the North-Westward on our western coasts later and increasing to a fresh gale in several places.

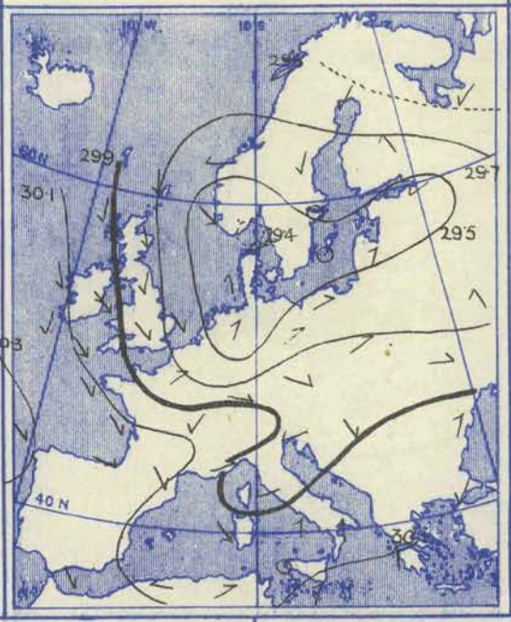
Barometer at 8 a.m. above 30·2 ins. (1) over the Iberian Peninsula, and (2) over all the south-eastern parts of Europe, and decreasing to 29·9 ins. at Archangel, to below 29·4 ins. in a depression over the south of Sweden, and to below 29·0 ins. in a more important system off the north of Scotland. Scotch disturbance moving south-eastwards to the North Sea later and becoming less deep. Pressure increasing quickly on our extreme north and north-west coasts, and gradients growing steeper.

Saturday, 17th October, 1903.

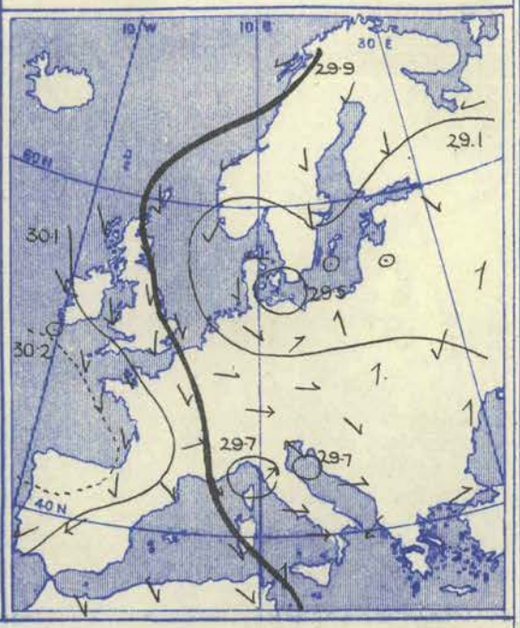
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull as a whole, but fine in some parts of southern Europe. Rainy at a few of our own stations, in the south of Sweden, central Europe, and at Moscow, and snow falling at Ulleaborg and St. Petersburg. Rain falling later in most parts of our area—not heavily as a whole, but 0·7 in. at Copenhagen, 0·9 in. at Swinemünde, and 1·1 ins. at Trieste.

Temperature fallen except over our Islands and Italy. Readings at 8 a.m. highest, 70° at Oran, 69° at Athens and Malta, 68° at Leghorn, and 67° at Lesina and Barcelona. Lowest, (1) 16° at Helsingfors, (2) 24° at Archangel, 26° at Bodö, (3) 44° at Munich and Belfort. Rising subsequently to 58° at Bath and Leith, to between 60° and 70° in most parts of France, to above 70° at most Italian and Spanish stations, to 82° at Algiers, and to 88° at Tunis. Maximum only 50° at Belfort and 52° at Munich.

Wind in morning showing a cyclonic circulation around the Baltic and Denmark, and a similar movement over the Gulf of Genoa and the north of Italy. North-Westerly winds strong to a gale over our Islands and the north of France, but little force elsewhere. No important change as a whole later, but force decreasing over our Islands.

Barometer risen nearly an inch in the Hebrides, fallen over the major portion of the Continent. Readings at 8 a.m. ranging from 30·31 ins. at Corunna, above 30·1 ins. over the central parts of the Mediterranean, and from 29·8 ins. in the extreme north, to below 29·5 ins. in a large irregularly shaped area embracing Denmark, the south of Scandinavia, the Baltic, and the Baltic provinces of Russia, and to 29·4 ins. at the Scaw. Latter moving eastwards during day. A complex disturbance appearing over the Gulf of Genoa and northern Italy.

IV.—GENERAL NOTES, etc.

The general distribution of barometric pressure varied a good deal during this period, and nearly every part of our area was at one time or another under the direct influence of a cyclonic disturbance. Pressure was, however, as a rule, highest over the Iberian Peninsula, the Mediterranean, and south-eastern Europe, or in the most northern parts of our area, while the chief depressions appeared on our own western coasts, and generally moved north-north-eastwards. The direction of the wind was consequently mainly Southerly or South-Westerly over the United Kingdom and its neighbourhood, and South-Easterly to Easterly over Denmark and Scandinavia. In force it was fresh or strong, and often blew with the strength of a moderate to fresh or strong gale. Over the more southern and south-eastern portion of our area the wind was more variable in direction and generally of little force. Towards the end of the week a change in the relative distribution of pressure was brought about by a disturbance which had travelled north-north-eastwards to the Shetlands suddenly altering its course and moving south-eastwards over the North Sea. The resulting North-Westerly winds over these Islands were strong to a gale in force. Over the countries bordering the Mediterranean the weather was almost continually dry, and rain did not often occur in the central regions, but in all the more northern and north-western countries there was much cloud and frequent rain, many of the measurements being large. Temperature fell and showed a tendency to assume an autumnal distribution on the continent, but it was usually rather high for the time of year over the United Kingdom.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 242.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	17·0	− 1·6	24	− 2
STRATHPEFFER SPA	5·5	− 15·9	8	− 22
EDINBURGH	16·9	− 1·7	23	− 2
COCKLE PARK	20·7	—	28	+ 1
NEWCASTLE-ON-TYNE	16·3	—	22	—
YORK	16·4	− 3·5	23	− 5
CROMER	26·7	—	36	+ 1
LOWESTOFT	26·7	—	36	—
DUNMOW	24·9	—	34	—
SHEFFIELD	23·4	—	32	—
WORKSOP	21·8	+ 2·3	30	+ 3
THURCASTON	24·7	+ 4·2	33	+ 6
TUNBRIDGE WELLS	24·4	—	33	—
MARGATE	24·9	− 0·1	34	0
BROADSTAIRS	26·0	—	35	—
RAMSGATE	—	—	—	—
EASTBOURNE	23·6	− 4·4	32	− 6
BRIGHTON	27·4	− 1·3	37	− 2
WORTHING	29·0	—	39	—
BOGNOR	30·2†	—	40†	—
WATERGATE PARK	25·8*	—	34	—
WESTBOURNE	31·0†	+ 4·2	41†	+ 6
VENTNOR HOSPITAL	28·1	− 0·9	38	− 1
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	23·5	+ 0·5	32	+ 1
SOUTHPORT	21·6	—	29	—
RHYL	25·3	—	34	—
ABERDOVEY	19·7†	—	27†	—
TENBY	24·5	− 0·5	33	− 1
TORQUAY	26·5	+ 0·7	35	+ 1
NEWQUAY	27·5	+ 1·0	37	+ 1
GUERNSEY	29·6†	− 6·9	27†	− 9

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

Date of Report.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Sept. 19th, 1903.	York	—	—	—	—	—	—	—	—	—	—	—	37·9	+ 10·5	44	+ 12
" " Oct. 3rd, "	Bognor	—	—	—	—	—	—	—	—	—	—	—	29·7	—	37	—
" " " " "	Newquay	—	—	—	—	—	—	—	—	—	—	—	24·9	− 5·2	31	− 7
" " " 10th, "	Tenby	—	—	—	—	—	—	—	—	—	—	—	23·4	− 3·9	30	− 5
" " " " "	Swarcaton	63	45	59·4	51·4	55·3	+ 5·5	93	0	6	2·36	+ 1·60	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 42.] *Third Series.*

WEEK ENDING SATURDAY, OCTOBER 24TH, 1903.

[*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 248.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	33	50·8	41·3	45·9	1 above	30	− 1	2	− 8	1784	− 96	505	− 73
	1. SCOTLAND, EAST	59	32	51·9	40·3	45·9	1 above	34	+ 1	5	− 8	2027	−199	519	−109
	2. ENGLAND, N.E.	60	35	52·8	42·8	47·7	1 above	40	+ 1	0	− 7	2407	− 18	342	−150
	3. ENGLAND, EAST	59	32	54·6	43·5	48·9	1 above	48	+ 3	0	− 8	2895	+ 84	322	−228
	4. MIDLAND COUNTIES	58	31	53·7	43·5	48·4	2 above	45	+ 4	0	−10	2671	− 94	361	−207
	5. ENGLAND, SOUTH	61	30	56·1	45·9	50·8	2 above	62	+ 8	0	− 5	3076	− 1	208	−195
Principal Grazing Districts.	6. SCOTLAND, WEST	59	35	53·8	43·5	48·5	2 above	46	+ 8	0	− 7	2328	− 38	324	−113
	7. ENGLAND, N.W.	60	33	54·0	45·1	49·4	2 above	52	+ 9	0	− 5	2597	+ 2	262	−142
	8. ENGLAND, S.W.	60	34	56·2	47·4	51·7	3 above	68	+17	0	− 3	2976	+104	162	−148
	9. IRELAND, NORTH	59	35	53·2	44·2	48·6	1 above	46	+ 5	0	− 6	2403	− 94	286	− 82
	10. IRELAND, SOUTH	61	36	55·2	45·5	50·2	2 above	57	+ 8	0	− 5	2860	+ 30	183	− 82
	— CHANNEL ISLANDS	60	43	58·3	50·2	54·1	1 above	85	+12	0	0	3435	+105	49	− 68

Rainfall.

Bright Sunshine.

	DISTRICTS. (See p. 248.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	17	4 more	211	+33	55·5*	+17·9	12	− 5	17	− 7	973	− 78	25	− 2
	1. SCOTLAND, EAST	6	7	0 (average)	188	+33	33·2	+ 8·7	10	− 9	14	−13	1084	−111	28	− 3
	2. ENGLAND, N.E.	5	4	2 less	159	+17	26·3	+ 6·4	6	−14	9	−19	1176	− 91	31	− 2
	3. ENGLAND, EAST	6	7	1 more	143	+ 1	25·7	+ 6·5	10	−13	14	−19	1349	−104	35	− 3
	4. MIDLAND COUNTIES	6	6	1 less	156	+19	29·9	+ 7·9	6	−14	9	−19	1170	− 86	31	− 2
	5. ENGLAND, SOUTH	6	14	6 more	159	+26	29·8	+ 8·0	10	−13	14	−18	1424	− 41	37	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	18	7 more	194	+33	54·4	+16·3	11	− 6	15	− 9	1208	− 38	31	− 1
	7. ENGLAND, N.W.	7	11	2 more	183	+32	35·7	+ 8·7	9	− 9	13	−12	1284	+ 53	33	+ 1
	8. ENGLAND, S.W.	7	12	2 more	176	+24	39·3	+ 9·5	16	− 5	23	− 8	1385	−113	36	− 3
	9. IRELAND, NORTH	6	12	3 more	214	+33	39·5	+11·2	21	+ 2	30	+ 3	1086	− 66	28	− 2
	10. IRELAND, SOUTH	6	10	0 (average)	194	+32	39·9	+ 8·7	22	0	32	0	1204	−110	31	− 3
	— CHANNEL ISLANDS	7	14	4 more	188	+33	30·2	+ 5·7	19	− 6	27	− 8	1619	−111	43	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was again dull and rainy throughout Great Britain, and rainy, but less dull, over Ireland. Thunder and lightning were experienced in several parts of England on Thursday.

Temperature continued above the mean, the excess varying from 1° or 2° over the country as a whole to 3° in England S.W. The highest of the maxima occurred about the middle of the week, and ranged from 61° in England S. and Ireland S., and 60° or 59° in most other districts, to 57° in Scotland N. The lowest of the minima, registered as a rule at the end of the period, were below 35° generally, and as low as 31° and 30° respectively in the Midland Counties and England S.; in the Channel Islands, however, the thermometer fell no lower than 43°.

Rainfall was again more than the mean in most districts, but was a little less in England N.E. and the Midland Counties, and just equal to the normal in Scotland E. and Ireland S. In England S. and Scotland W. the excess was large, and rather large in the Channel Islands.

Bright Sunshine was again very deficient except in Ireland. The percentage of the possible duration ranged from 32 in Ireland S., 30 in Ireland N., and 27 in the Channel Islands, to 17 in Scotland N., and to 9 in England N.E. and the Midland Counties.

Barometer and Wind. A succession of large and generally deep disturbances again appeared from the Atlantic, and, with their secondaries, brought strong winds or gales from between South and South-West to all parts of the United Kingdom. Most of the centres of the primary systems remained outside our coasts, but a deep secondary passed eastwards across the country on Thursday, and in the rear of this the wind veered temporarily to the Northward in the western and northern districts, and to the Westward in the south-east.

3 7 | 70 Wy. & S. Ltd
| 90 12 | 02

II.—DATA from which the SUMMARY on page 247 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	53	35	50·0	42·7	46·2	+ 1·1	29	0	5	0·89	- 0·11	*	*	*	*
	Stornoway	55	37	51·1	42·1	46·5	+ 1·8	32	0	7	2·64	+ 1·44	14·4	- 3·6	22	- 5
	Wick	55	33	52·1	40·3	46·0	+ 0·7	35	5	3	0·80	+ 0·11	*	*	*	*
	Lairg	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Glencarron	55	36	48·8	39·2	43·9	- 0·3	25	8	7	3·14	+ 1·09	*	*	*	*
	Fort Augustus	57	34	51·5	40·2	45·7	0·0	33	5	7	1·22	+ 0·27	5·1	- 7·4	8	- 11
	Fort William	55	39	51·1	43·4	47·1	+ 0·7	36	0	7	1·55	- 0·20	5·4	- 10·4	8	- 15
1. SCOTLAND, E.	Nairn	59	32	53·6	38·9	46·0	+ 1·1	41	9	6	0·50	- 0·04	*	*	*	*
	Aberdeen	53	35	51·0	41·4	46·1	+ 0·2	31	2	4	0·76	+ 0·08	10·2	- 10·6	15	- 16
	Braemar	56	34	48·4	39·4	43·8	+ 1·6	24	7	7	0·58	- 0·32	*	*	*	*
	Ochtertyre	56	33	51·7	40·1	45·7	+ 0·4	34	5	5	1·39	+ 0·43	*	*	*	*
	Leith	59	39	55·4	42·9	49·0	+ 1·9	49	0	6	0·28	- 0·17	*	*	*	*
	Marchmont	54	33	51·1	38·9	44·8	+ 0·1	33	9	6	0·57	- 0·23	10·5	- 7·5	15	- 11
2. ENGLAND, N.E.	Alnwick Castle	60	36	53·6	40·9	47·1	+ 0·9	40	3	6	0·39	- 0·36	*	*	*	*
	Durham	55	35	50·8	41·4	46·0	+ 0·1	31	2	6	0·69	- 0·01	4·3	- 14·5	6	- 21
	Shields	57	37	53·0	43·4	48·1	+ 1·3	43	0	6	0·65	+ 0·04	*	*	*	*
	Scarborough	57	36	52·4	43·3	47·7	+ 0·2	40	0	5	0·53	- 0·20	2·1	—	3	—
	Spurn Head	58	39	54·1	44·3	49·1	+ 0·6	50	0	3	0·06	- 0·48	*	*	*	*
	Fulbeck (Lincolnshire)	55	36	53·0	43·2	48·0	+ 1·5	42	0	5	0·21	- 0·32	9·5	—	14	—
3. ENGLAND, E.	Hillington	56	32	54·4	41·6	47·8	+ 0·5	42	1	6	0·56	- 0·07	9·0	- 11·5	13	- 16
	Yarmouth	57	35	54·1	42·7	48·2	- 0·3	43	0	7	0·51	- 0·15	*	*	*	*
	Geldeston	59	35	55·3	42·4	48·7	+ 0·4	47	0	5	0·50	- 0·11	11·3	- 12·4	16	- 18
	Cambridge	57	34	54·9	42·5	48·5	+ 1·0	46	0	7	0·73	+ 0·20	6·8	- 16·0	10	- 23
	Felixstowe	57	42	54·4	45·7	49·9	+ 1·6	55	0	7	0·70	—	15·9†	—	22†	—
	Rothamsted	55	33	53·1	42·7	47·8	+ 1·0	41	0	6	1·02	+ 0·36	9·2	- 13·8	13	- 19
	Shoeburyness	57	40	55·9	46·6	51·1	+ 2·5	64	0	6	0·86	+ 0·34	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	55	34	51·5	41·8	46·5	+ 0·7	32	1	4	1·05	+ 0·30	5·8	—	8	—
	Bawtry (Hesley Hall)	58	35	53·3	43·4	48·2	+ 1·9	43	0	5	0·29	- 0·32	*	*	*	*
	Nottingham	56	36	54·7	43·7	49·0	+ 1·9	49	0	5	0·36	- 0·20	5·3	—	8	—
	Loughborough	58	36	54·8	44·3	49·4	+ 2·2	52	0	6	0·27	- 0·33	*	*	*	*
	Colly Weston (Stamford)	57	35	53·7	44·0	48·7	+ 1·4	47	0	7	0·30	- 0·30	*	*	*	*
	Cheadle	55	36	51·9	43·1	47·4	+ 1·8	38	0	7	0·61	- 0·15	*	*	*	*
	Birmingham (Edgbaston)	56	37	52·8	44·2	48·4	+ 1·4	45	0	7	0·75	+ 0·11	7·1	—	10	—
	Hereford	58	31	54·9	44·2	49·4	+ 2·2	52	0	7	0·74	+ 0·11	*	*	*	*
	Cirencester	58	32	54·6	41·0	47·6	+ 1·3	43	3	6	0·48	- 0·23	8·9	- 12·7	13	- 18
	Oxford	56	37	54·3	45·0	49·5	+ 2·0	53	0	6	0·84	+ 0·27	9·5	- 12·0	13	- 17
5. ENGLAND, S.	London	56	36	55·1	44·1	49·4	+ 0·7	52	0	6	0·94	+ 0·36	6·4‡	- 9·8‡	9‡	- 14‡
	Swarraton (Alresford)	54	30	53·1	42·8	47·8	+ 1·0	41	0	6	1·72	+ 0·96	*	*	*	*
	Dungeness	59	37	56·9	46·7	51·7	+ 1·6	68	0	5	0·92	+ 0·19	12·3	—	17	—
	Hastings (St. Leonards)	58	38	55·3	45·0	50·0	+ 0·2	56	0	7	1·03	+ 0·19	12·4	- 13·3	18	- 19
	Southampton	58	37	56·4	45·8	50·9	+ 1·3	62	0	7	2·23	+ 1·46	12·6	- 11·6	18	- 16
	Portland Bill	57	49	56·1	51·0	53·5	+ 3·6	81	0	7	1·67	—	*	*	*	*
	Shaftesbury	61	40	59·7	45·8	52·5	+ 5·6	74	0	7	1·24	+ 0·39	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	56	38	53·5	42·7	47·9	+ 1·2	41	0	7	2·58	+ 0·91	*	*	*	*
	Glasgow	56	39	51·8	43·4	47·5	+ 1·8	39	0	7	0·84	- 0·01	10·7	- 3·6	16	- 5
	Cally	59	35	56·6	43·1	49·7	+ 3·3	54	0	7	2·30	+ 1·20	*	*	*	*
	Aspatria	57	37	53·7	42·6	48·0	+ 1·8	42	0	6	1·01	—	8·7	—	12	—
	Douglas (Isle of Man)	57	38	53·5	45·7	49·5	+ 1·9	53	0	6	2·35	+ 1·32	12·7	- 9·1	18	- 13
7. ENGLAND, N.W.	Newton Rigg	56	33	52·4	41·2	46·6	+ 1·4	36	2	6	0·86	—	7·9	—	11	—
	Stonyhurst	55	38	51·6	44·5	48·0	+ 1·6	42	0	7	1·32	+ 0·19	10·1	- 8·4	14	- 12
	Blackpool	57	40	54·7	44·8	49·6	+ 1·8	53	0	7	0·95	+ 0·02	11·9	- 6·7	17	- 10
	Manchester (Prestwich)	58	37	53·5	43·9	48·6	+ 1·9	46	0	7	1·22	+ 1·31	5·4	—	8	—
	Liverpool Obsy. (Bidston)	56	41	53·7	46·0	49·7	+ 1·4	54	0	7	1·41	+ 0·64	8·4	—	12	—
	Chester (Hawarden Bridge)	60	40	56·2	46·5	51·2	+ 2·6	64	0	7	0·93	—	*	*	*	*
	Llandudno	59	41	54·7	46·9	50·7	+ 1·2	61	0	7	1·04	+ 0·15	7·9	- 10·5	11	- 15
	Holyhead	57	45	54·9	47·3	51·0	+ 1·1	63	0	7	1·27	+ 0·31	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	57	49	56·0	50·7	53·3	+ 2·8	79	0	7	1·22	+ 0·28	14·6	- 7·6	21	- 11
	Clifton	59	40	55·8	47·8	51·7	+ 3·5	68	0	7	0·58	- 0·27	*	*	*	*
	Bath	59	35	56·9	45·6	51·1	+ 2·7	64	0	6	0·75	+ 0·05	10·3	—	15	—
	Arlington (N. Devon)	57	38	54·7	44·9	49·7	+ 1·4	54	0	7	1·57	+ 0·17	*	*	*	*
	Cullompton	60	34	56·8	44·5	50·5	+ 3·0	60	0	6	1·01	+ 0·14	15·1	- 5·4	21	- 8
	Falmouth	59	45	56·2	48·5	52·2	+ 1·2	71	0	7	1·41	+ 0·21	22·2	+ 3·0	31	- 4
	Plymouth	59	45	57·1	49·7	53·3	+ 2·8	79	0	7	1·52	+ 0·67	19·0	- 3·7	27	- 5
9. IRELAND, N.	Malin Head	55	43	51·6	45·3	48·4	+ 0·2	45	0	5	0·74	+ 0·06	*	*	*	*
	Edenfel (Omagh)	56	35	52·3	42·3	47·2	+ 2·0	36	0	6	1·45	+ 0·59	*	*	*	*
	Blacksod Point	56	45	54·0	48·0	50·9	+ 1·6	62	0	7	1·70	+ 0·52	*	*	*	*
	Markree Castle	58	37	54·5	43·2	48·7	+ 2·3	47	0	7	1·30	+ 0·35	22·3	+ 3·2	32	+ 5
	Armagh	58	38	53·4	42·8	47·9	+ 1·7	41	0	6	0·81	+ 0·16	20·1	+ 0·6	29	+ 1
	Donaghadee	59	38	53·6	43·3	48·3	+ 0·7	44	0	6	0·91	+ 0·19	*	*	*	*
10. IRELAND, S.	Dublin	60	40	56·0	45·6	50·7	+ 2·2	61	0	5	0·43	- 0·23	21·9	- 1·8	31	- 3
	Birr Castle	59	41	55·3	43·6	49·3	+ 2·7	51	0	5	0·58	- 0·09	24·2	+ 2·9	35	+ 4
	Kilkenny	58	36	55·1	42·7	48·7	+ 1·2	47	0	6	0·59	- 0·11	*	*	*	*
	Waterford	54	36	51·9	44·3	48·0	- 0·3	42	0	6	1·45	+ 0·56	*	*	*	*
	Roche's Point	57	46	55·4	47·9	51·5	+ 1·3	67	0	7	0·98	+ 0·02	*	*	*	*
	Valencia	58	46	55·7	47·7	51·6	+ 1·0	67	0	7	2·03	+ 0·76	20·4	- 1·8	29	- 3
	Killarney	61	44	57·8	46·6	52·0	+ 2·8	70	0	6	1·14	- 0·18	*	*	*	*
	Foynes	61	45	54·6	45·9	50·1	+ 2·0	57	0	6	0·39	- 0·49	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	60	48	57·9	50·6	54·1	+ 1·3	85	0	7	1·25	+ 0·39	24·1	- 0·4	34	- 1
	Jersey	60	43	58·3	49·7	54·0	+ 1·3	84	0	7	1·49	+ 0·48	19·9	- 7·5	28	- 11

Stations Marked ℳ are in connection with the Royal Meteorological Society, and those marked 𝒮 with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

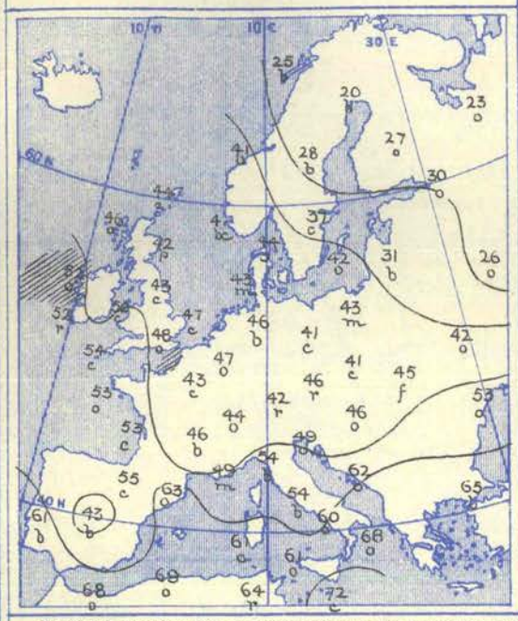
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

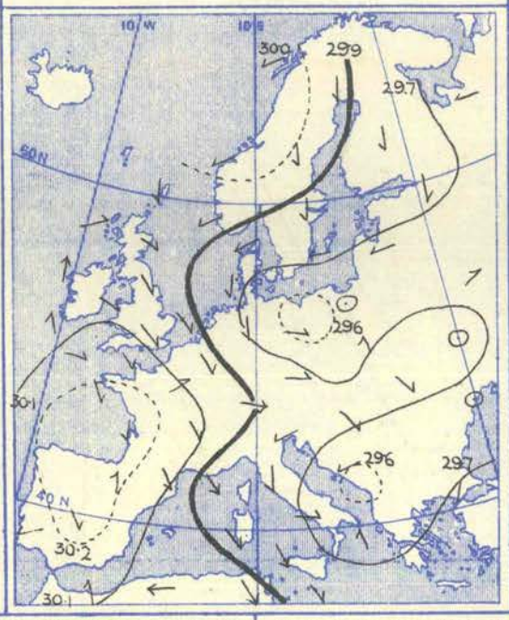
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 18th October, 1903.

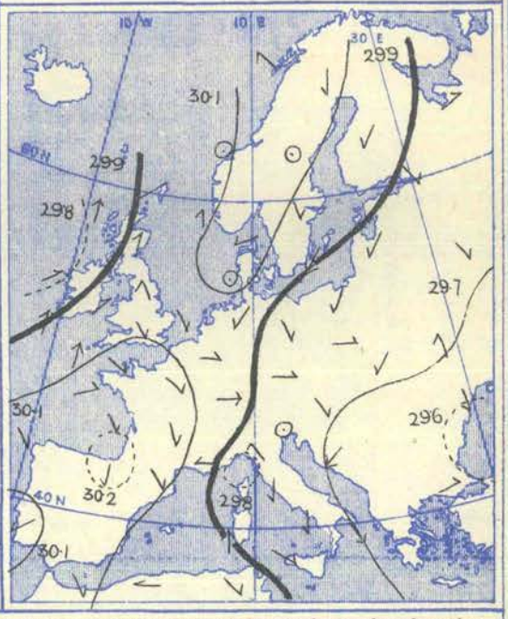
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull and overcast over the greater part of Europe and north Africa, with rain at various German stations, at Pesaro and Tunis, and snow at Haparanda. Mist or fog on the Baltic, and at Fanö and at Lemberg. Later rain falling over nearly the whole of the British Isles and Germany, many parts of Austria, and locally in Italy and Russia (snow in places), an inch being measured at Brindisi, the amounts in our Islands being, as a rule, small.

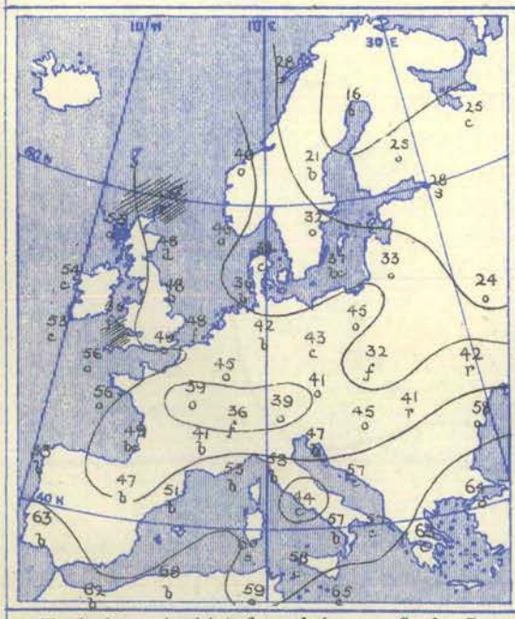
Temperature changing irregularly, but the morning values in most places showing a decline, especially in the neighbourhood of north Italy, where the decrease in twenty-four hours amounted to from 10° to 18°. Highest readings at 8 a.m., 72° at Malta, 60° at Algiers, and 68° at Brindisi and Oran. Lowest, 26° at Moscow and Haparanda, 25° at Bodö, 23° at Archangel, and 20° at Uleaborg. Over our Islands ranging from 39° at Nairn, to 55° at Jersey. Subsequently rising to between 55° and 60° at many of our home stations, to 84° at Biskra, 82° at Laghouat, and 81° at Nemours, to 72° at Cap Bearn, and 70° at Brindisi, to 32° at St. Petersburg and Haparanda, and to 30° at Bodö.

Wind at 8 a.m. very variable in direction and force under the influence of a number of weather systems. Mostly light or moderate, but blowing strongly at some stations in the Mediterranean regions, a moderate North-West gale at Tunis. No important change during the day, but freshening Southerly to South-Westerly breezes setting in on our western coasts towards evening.

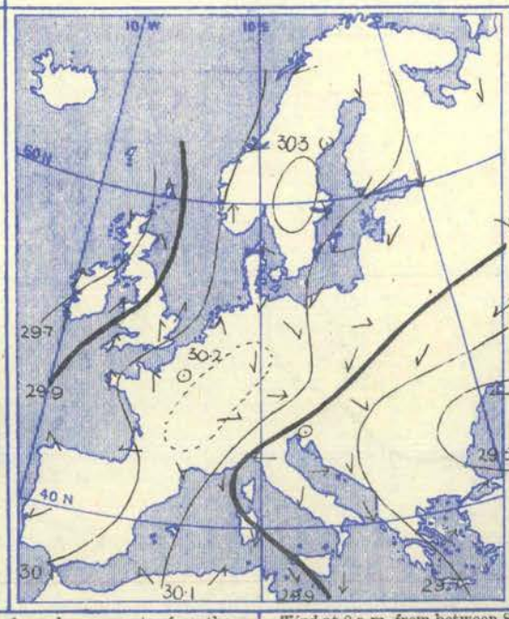
Barometer in morning highest, 30·2 ins. and upwards in an anticyclone over the Bay of Biscay and vicinity, and above 30 ins. in another spreading in over Norway. Lowest, about 29·5 ins. in a depression centred over north Germany, and 29·6 ins. in others on the Adriatic and over south-eastern Russia. Later the northern anticyclone increasing in intensity and covering the whole of Scandinavia, a disturbance approaching our north-western coasts and another forming over the Gulf of Genoa.

Monday, 19th October, 1903.

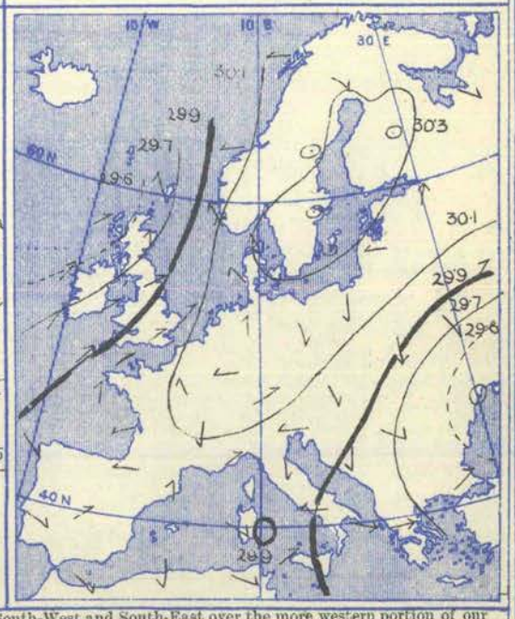
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair to fine and clear over Sweden, Denmark, and many parts of southern Europe, and Algeria; generally cloudy to overcast elsewhere, with rain in various scattered localities. Misty or fog at some stations on the English coasts, also over central France and at Tunis. During the day rain falling at nearly all stations in the British Isles and the north of France, and at a few places in Germany, Austria, Italy, and South Russia, 0·5 in. being measured at Stornoway, and 0·7 in. at Brindisi.

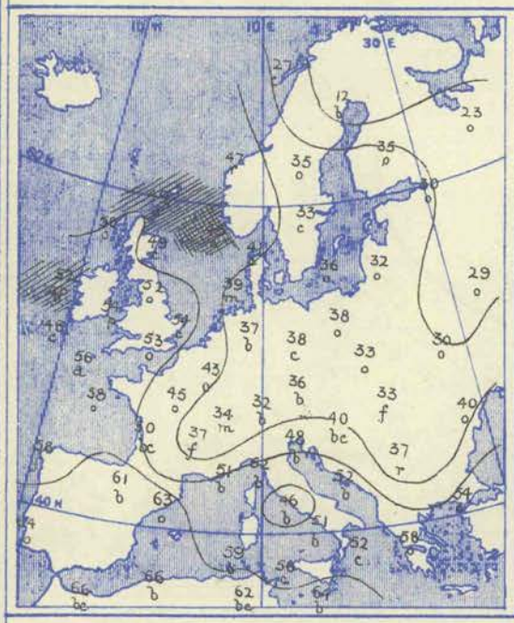
Temperature risen in all parts of our Islands except Jersey, and fallen at nearly the whole of the Continental stations, the decline being rather decided over southern Italy, Tunis, and Malta. Highest readings at 8 a.m., 68° at Algiers, 65° at Malta, and 64° at Constantinople. Lowest, 16° at Haparanda, 21° at Hernösand, 24° at Moscow and Helsingfors, and 25° at Archangel, Uleaborg, and Kuopio. As a rule the values very irregular, 60° at Nicolaieff, 57° at Pembroke, 47° at Biarritz, 44° at Rome, and 39° at Paris. Rising during the day to 79° at Algiers, Biskra, and Nemours, and 77° at Madrid, to between 55° and 60° in most parts of the British Isles, to 32° at St. Petersburg, 28° at Bodö, and 27° at Haparanda.

Wind at 8 a.m. from between South-West and South-East over the more western portion of our area, and generally from between North-West and North-East elsewhere. The Southerly current light or moderate in force, the polar current blowing fresh or strong in places, a moderate gale at Brindisi. Freshening Southerly breezes on our own coast towards evening, a fresh gale in the south-west of Norway. No important changes occurring in the far east and south.

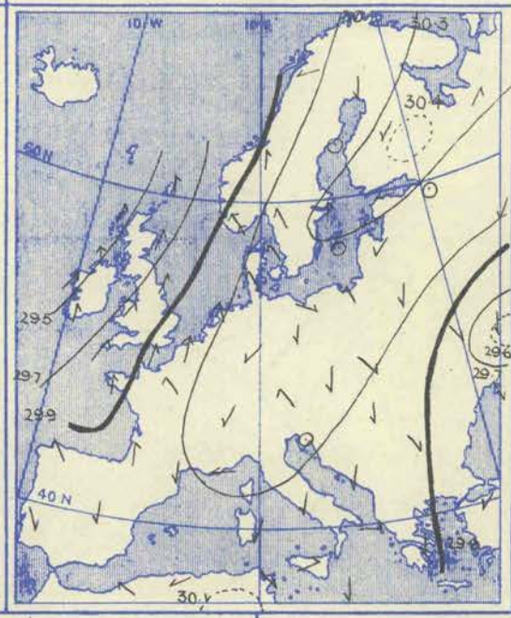
Barometer in morning highest, 30·3 ins. and upwards in an anticyclone centred over southern Sweden, and above 30·2 ins. in another over central France and north-west Germany. Lowest, below 29·5 ins. in a depression lying over the Black Sea region, and below 29·7 ins. at our northern and north-western stations. In the course of the day the two high-pressure systems coalescing, the centre extending from Denmark to Finland, with readings above 30·3 ins.; the Black Sea disturbance filling up slowly, and the one off our north-western coasts deepening gradually.

Tuesday, 20th October, 1903.

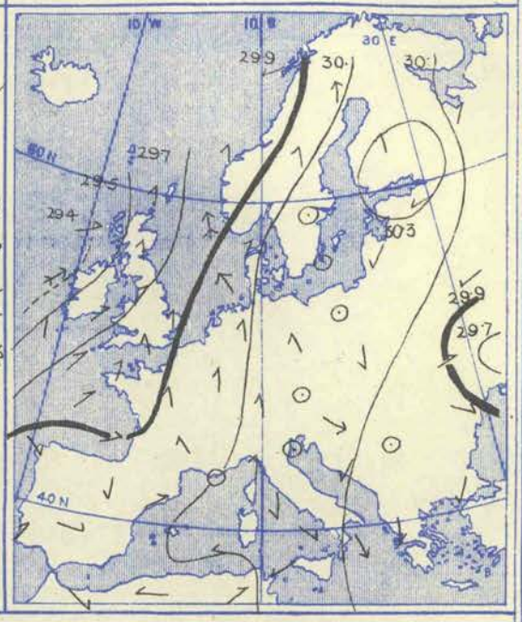
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine over a limited area extending from the Elbe down to Algeria, elsewhere generally cloudy and dull, with rain in scattered localities, mist on the North Sea coasts and in eastern France, and fog at Corunna, Oporto, Tunis, and Lemberg. During the day no great alteration taking place in the general conditions, the rainfall being nowhere heavy, and in some parts of eastern and north-eastern Europe there were light falls of snow.

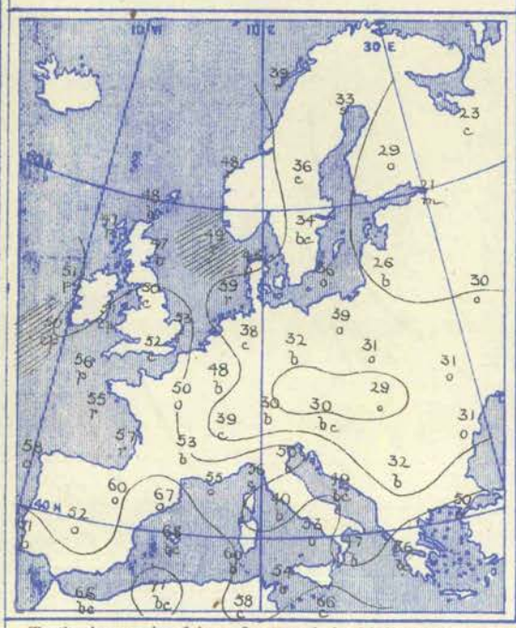
Temperature changing very irregular, rising in some places, falling in others. Morning readings highest, 68° at Bilbao, 66° at Algiers and Oran, and 64° at Lisbon and Malta; lowest, 27° at Bodö, Ulealborg, and Helsingfors, 23° at Archangel, and 12° at Haparanda. Over our Islands ranging from 46° at Nairn and 48° at Valencia, to 56° at Scilly. In the course of the day rising to 79° at La Calle and Oran, 77° at Bilbao, Algiers, Biskra, and Laghouat, and 73° at Madrid and Palma; 69° at Jersey and Scilly, but only 37° at Hernösand and Memel, 36° at Cracow, and 32° at Haparanda.

Wind at 8 a.m. was from between South-West and South-East generally over the western half of our area, and from between North-West and North-East over the eastern half. Moderate or light breezes prevailed, but at some stations on our own coasts there was a fresh or strong breeze, and at Skudesnaes a fresh gale. There was no important change in the direction during the day, but there was an increase of force to a fresh gale on the coast of Mayo and to a strong breeze on the Danish coast.

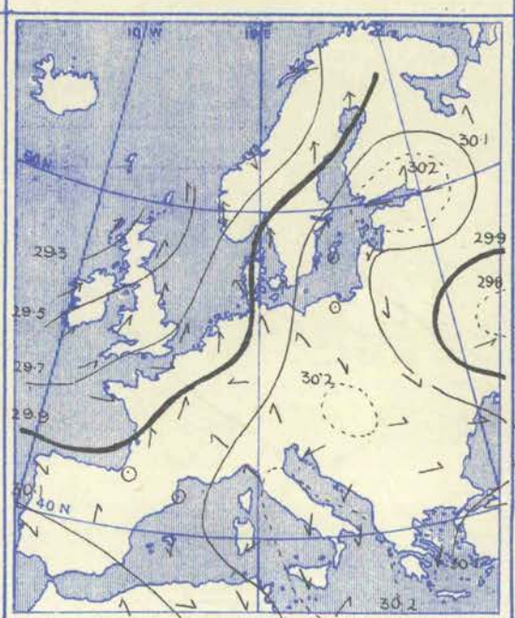
Barometer in morning highest, above 30·4 ins. in Finland, in an anticyclone extending from the western Mediterranean in a north-easterly direction to the White Sea. Lowest, below 29·5 ins. in a disturbance centred outside our north-western coasts, and below 29·6 ins. in another situated over southern Russia. A shallower depression indicated near the Bay of Biscay. The anticyclone later decreasing a little in intensity, the disturbance off our north-western coasts deepening, and the south-Russian one filling up or moving away to the eastward. A rise setting in over Portugal.

Wednesday, 21st October, 1903.

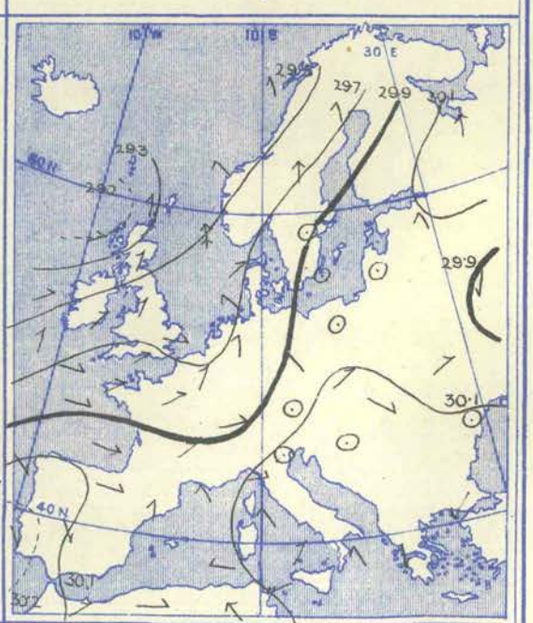
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine round the Mediterranean basin, very variable over the rest of our area, from fine to dull and gloomy, with rain falling in many localities and snow at the head of the Gulf of Bothnia. Misty in the east of Scotland and at St. Petersburg, foggy off Yarmouth. During the day rain experienced at nearly all stations in western, central, and northern Europe, the amounts being small, as a rule, but Dungeness had 0·5 in., Portland Bill and Fanö, 0·6 in., and Bodö 1·5 ins.

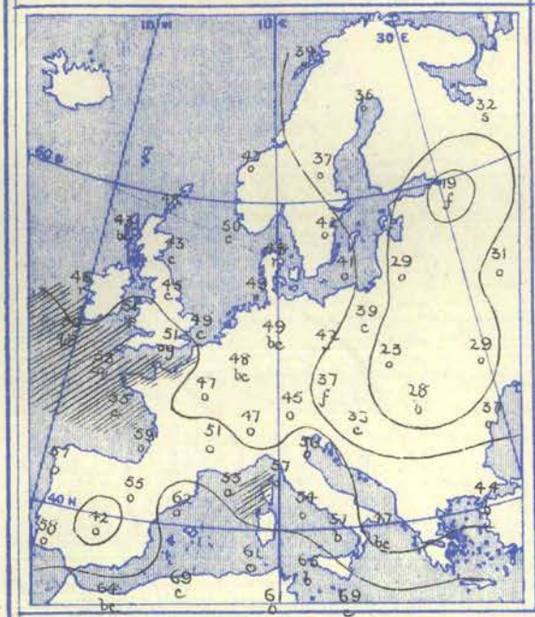
Temperature fallen over nearly the whole of the British Isles and the greater part of eastern Europe, risen in most other districts. Highest readings at 8 a.m. on the western Mediterranean, 71° at Algiers, 68° at Palma, 67° at Barcelona, and 66° at Nemours; 61° at Lisbon, 60° at Biarritz. Lowest, 40° at Rome, 29° to 32° at several stations in east central Europe and south Russia, 26° at Riga, 23° at Archangel, and 21° at St. Petersburg. Over our Islands ranging from 56° at Jersey and Scilly to 45° at Parsonstown and 44° at Nairn. Rising in the afternoon to 82° at Aumale, 81° at Algiers, 76° at Perpignan, 75° at Barcelona and Malta, 69° at Margate, but only to 37° at Haparanda, 32° at Lemberg, and 28° at St. Petersburg.

Wind in morning very variable in direction over southern Europe and Russia, a Southerly to South-Westerly current in the ascendant over western and northern Europe. A fresh or strong breeze at a few of our west coasts and at some Scandinavian and Danish stations, and a whole gale on the south-west coast of Norway, light breezes prevailing everywhere else. Becoming more Westerly in direction later round our own coasts and on the Bay of Biscay, and freshening a little in places. No important changes in other regions.

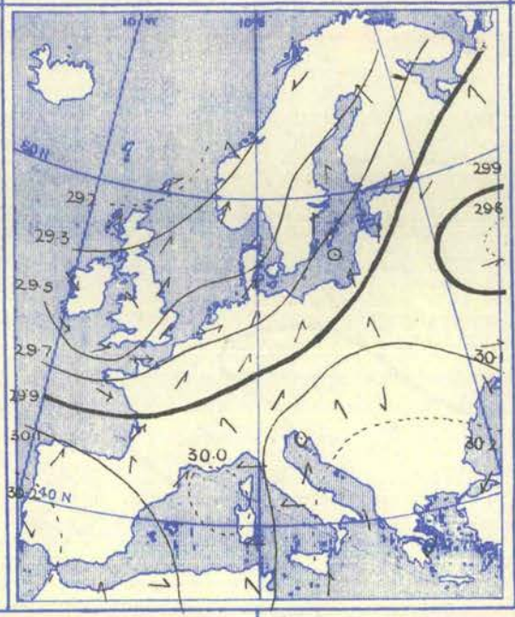
Barometer in morning highest, above 30·2 ins. in an anticyclone centred over the Gulf of Finland, in another occupying the neighbourhood of southern Italy, and in a small one over Vienna. Lowest, below 29·3 ins. in a depression outside the Hebrides, and below 29·8 ins. in another over south central Russia. By evening rising above 30·2 ins. in a new anticyclone spreading across Portugal; the Italian high pressure maintaining its ground and intensity, and the north Russian one gradually dispersing. The disturbance off the Hebrides continuing to deepen, and the central Russian one filling up.

Thursday, 22nd October, 1903.

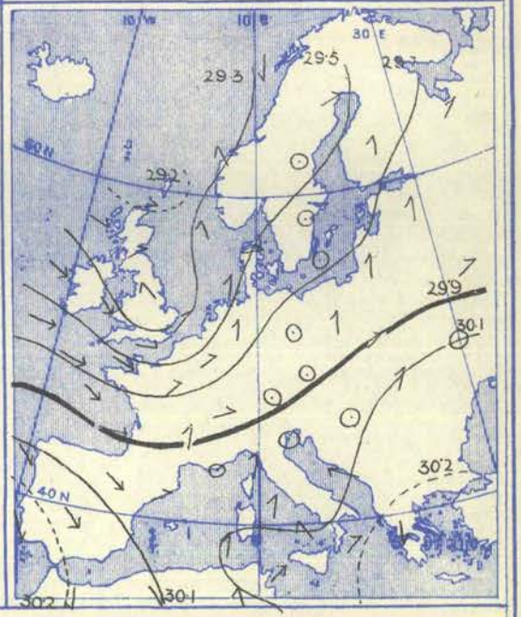
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and clear over a limited portion of south-eastern Europe, but elsewhere generally cloudy to dull and overcast, with rain in many parts of our Islands, Denmark, Scandinavia, and north Germany, and snow at Archangel. Misty on several sections of our own coasts; foggy at Prague, Vienna, Riga, and St. Petersburg. Rain falling later at the majority of the home and Continental stations, the amounts in most cases being small, but Haparanda and Ulcaborg measured 0·5 in., Jersey 0·7 in., and Rome 1·3 ins.

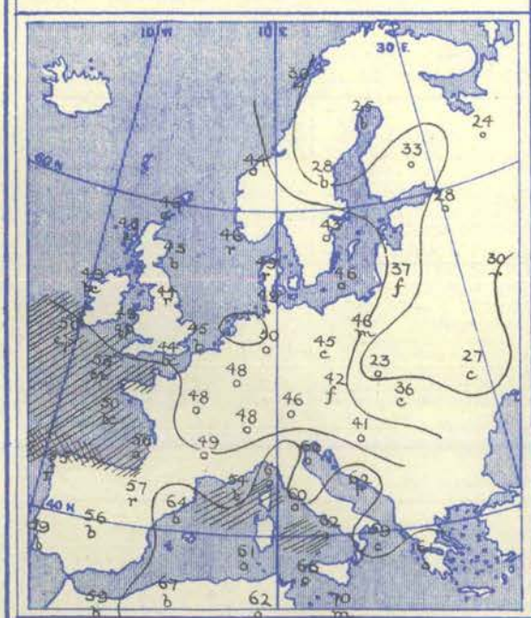
Temperature fallen at most stations in the British Isles, France, the Peninsula, and Algeria; risen nearly everywhere else, the rise being greatest over Germany. Highest morning readings, 69° at Algiers and Malta, and 65° at Aumale and Palermo. Lowest, 28° at Lemberg, 26° at Cracow, 23° at Warsaw, and 19° at St. Petersburg. The maximum readings attained in the afternoon were 82° at Tunis, 80° at Palermo, 79° at Nemours, 77° at Algiers and Oran, 70° at Bilbao, and 68° at Barcelona and Madrid. In our Islands 60° at Jersey, and 58° at Dungeness and Plymouth, but only 48° at Malin Head and Donaghadee. Over northern Europe 37° at Haparanda and 28° at St. Petersburg.

Wind in morning generally Southerly to Westerly in direction, but with local variations near the Irish Sea and on the western portion of the Mediterranean. Fresh or strong breezes about the English Channel, the Bay of Biscay, and southern Norway, a moderate gale at Scilly and Valencia. Elsewhere light breezes prevailing. Freshening somewhat along our southern coasts later, and falling light in the south of Norway.

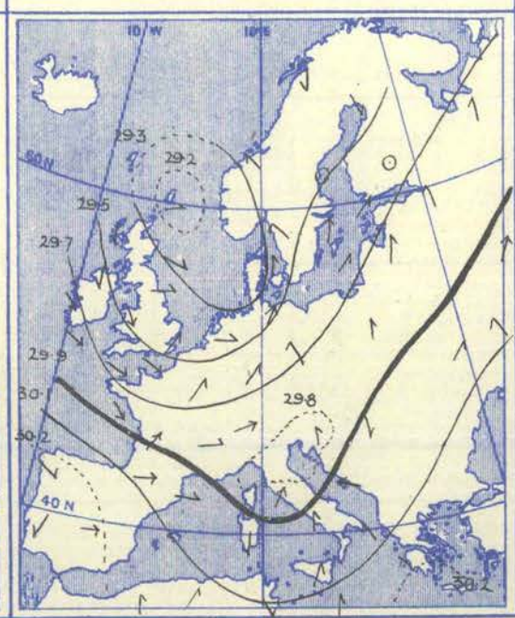
Barometer at 8 a.m. highest, 30·2 ins. and upwards in an anticyclone having its centre outside the coast of Portugal, and in another covering south-eastern Europe. Lowest, below 29·2 ins. in a disturbance lying off the north of Scotland, about 29·3 in another having its centre on St. George's Channel. Shallower depressions near Corsica and in central Russia. In the evening the anticyclones inclined to diminish in intensity, but the secondary depression moving across the north of England growing deeper, with readings below 29·2 ins.

Friday, 23rd October, 1903.

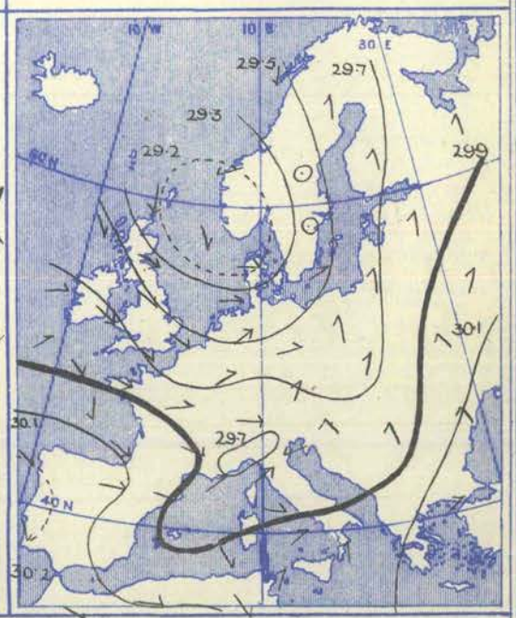
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning undergoing a decided improvement generally over our Islands, but still showery in places. Fine and bright in most parts of the Peninsula and in some parts of Algeria and Sweden, but over most of the Continental regions cloudy to dull and overcast, with rain at isolated stations, and foggy on the eastern shores of the Gulf of Bothnia, at Prague, Turin, and Corunna. Considerable sunshine later at most of the home stations, and rain falling at a large number of foreign stations—as much as 1·1 ins. at Naples and 1·5 ins. at Trieste.

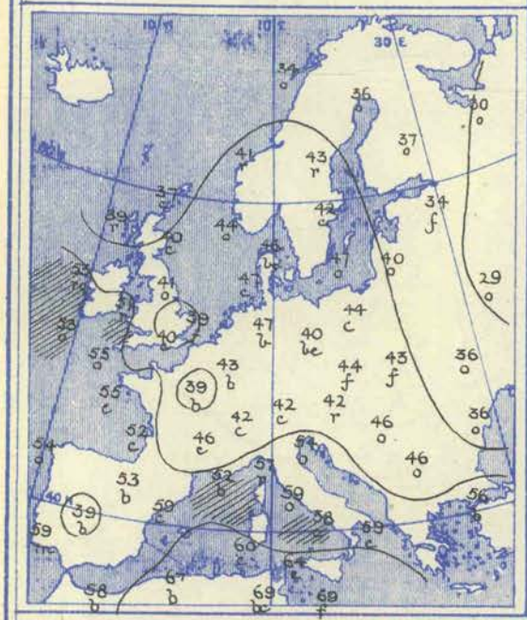
Temperature at 8 a.m. fallen at the majority of stations in western and northern Europe, risen nearly everywhere else, rather decidedly in some localities. Highest, 70° at Malta, 67° at Algiers, 66° at Palermo, 64° at Barcelona, and 63° at Bilbao. Lowest, 27° at Kiev, 25° at Haparanda, 24° at Archangel, and 23° at Warsaw. In our Islands ranging from 42° at Nottingham, and 43° at Aberdeen and Parsonstown, to 53° at Scilly. Rising in the afternoon to 79° at Nemours and Trieste, 77° at Algiers, La Calle, Tunis and Palermo, and 74° at Malta, to 45° at Stornoway, 36° at Haparanda and St. Petersburg, and 34° at Bodö.

Wind in morning exhibiting a cyclonic circulation round a depression whose centre was in the vicinity of the Shetlands, the North to Westerly current over our western districts, the English Channel, and down the Bay of Biscay being fresh or strong in force, a moderate gale in places. Elsewhere the various currents mostly moderate to light. By evening North-Westerly to South-Westerly fresh to strong winds or moderate gales on the upper part of the Western Mediterranean. No important change elsewhere.

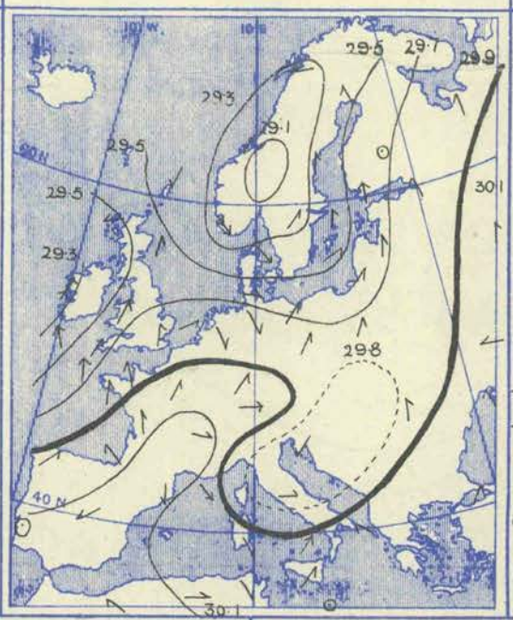
Barometer at 8 a.m. highest, 30·2 ins. and upwards over the western portion of the Peninsula and over Greece. Lowest, 29·2 ins. and less off the north-east of Scotland, and below 29·8 ins. in a shallow disturbance over north Italy. In the evening the Spanish anticyclone decreasing slightly, and the Grecian one transferred to the extreme south-east of Russia, the northern depression moving towards south Norway without increasing in depth, the Italian one deepening a little.

Saturday, 24th October, 1903.

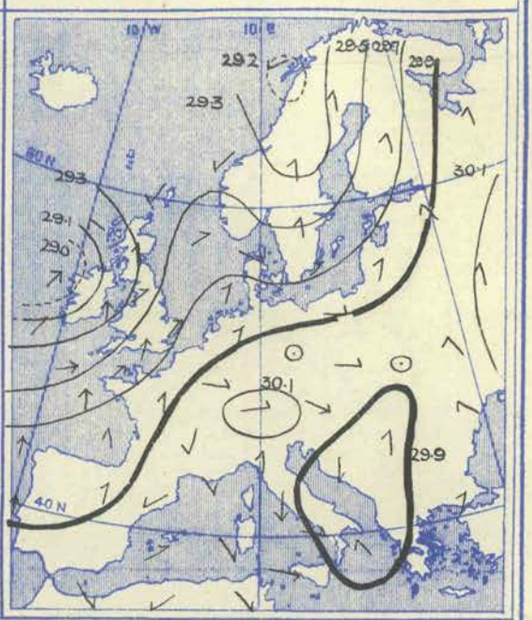
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather in morning fine and clear from the north-east of France to Denmark, and from the south of France and most parts of Spain to Algeria. In most other regions the sky was cloudy to overcast, with rain in the west and north of the British Isles, in various parts of Scandinavia and Finland, and at Vienna and Leghorn. Foggy at Malta, over east central Europe, and at St. Petersburg and Uleaborg. Subsequently the rain area extended to the whole of our Islands, the largest amounts being 0·6 in. at Wick, 0·7 in. at Aberdeen and Portland Bill, and 0·9 in. at Stornoway and Valencia. Rain falling also in many localities on the Continent, 0·7 in. at Lisbon and 0·8 in. at Oporto.

Temperature at 8 a.m. risen over our south-western districts, the north-west of France, Austria, Russia, and Sweden, fallen elsewhere. Highest readings, 69° at Malta and Tunis, 67° at Algiers, and 64° at Palermo. Lowest, 33° at Nikolaiev, 30° at Archangel, 29° at Charkow and Moscow. At our home stations ranging from 36° at Wick to 55° at Scilly. During the day rising to 81° at Biskra and Nemours, 79° at Algiers and Oran, and 75° at Laghouat and Tunis; in the far north to 37° at Bodö, Haparanda, and St. Petersburg.

Wind in morning very variable in direction, circulating round a number of centres of high and of low pressure. Generally South-Westerly over our Islands and strong to a gale in force at several of the west coast stations. Fresh or strong breezes at several Continental stations, and at Skudesnaes a whole gale from North-West. A moderate or fresh Southerly or South-Westerly gale experienced on many parts of our own coasts later, but with the exception of the Skudesnaes gale giving way to a light breeze no important modification taking place on the Continent.

Barometer at 8 a.m. highest, 30·2 ins. and upwards in an anticyclone in the extreme south-east of Russia, and above 30·1 ins. in another over south-western Europe and Algeria. Lowest, 29·1 ins. in a depression over south Norway, below 29·3 ins. off the north-west of Ireland, and below 29·8 ins. over north Italy and neighbourhood. Rising by evening over central Europe and north Italy; falling over the northern part of Scandinavia, and in the depression near Ireland sinking below 28·9 ins.

IV.—GENERAL NOTES, etc.

The week was marked by two fairly well-defined periods. During the first, which covered the earlier half of the week, the areas of lowest pressure frequented the north-western and south-eastern portions of the region under observation, and they were separated by a belt of high pressure extending in a general south-west to north-east direction, which moved slowly eastward. Subsequently the highest barometer readings were found over various parts of southern Europe, between Portugal and south-eastern Russia, while the whole of the rest of our area came under the influence of the disturbances which continued to arrive from the Atlantic, their centres in most cases moving on about a north-easterly course. Small secondary irregularities keeping on a more easterly path occasioned local variations in the general conditions. As a rule the disturbances were of no great depth, neither were the anticyclones remarkable for any great intensity. The type of conditions in these circumstances was very changeable and unsettled, but while the winds frequently blew strongly from various directions, and sometimes reached the force of a moderate or fresh gale, no storms of a very severe character were reported, except locally on the south-west coast of Norway. There was, however, an extensive prevalence of wet weather, the rainfall in many districts being both frequent and heavy. Thunderstorms visited a considerable number of stations, and lightning alone was seen over a wide region. Temperature was exhibiting a downward tendency, and over northern, eastern and east central Europe frost of more or less intensity was becoming of daily occurrence.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 248.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	18·2	+ 1·5	27	+ 2
STRATHPEFFER SPA	15·9	- 3·4	23	- 5
EDINBURGH	8·9	- 8·1	13	- 12
COCKLE PARK	10·5	—	15	—
NEWCASTLE-ON-TYNE	8·9	—	6	—
YORK	5·0	- 12·7	7	- 18
CROMER	13·5	—	19	—
LOWESTOFT	13·3	—	19	—
DUNMOW	4·9	—	7	—
SHEFFIELD	6·1	—	9	—
WORKSOP	2·6	- 15·1	4	- 22
THURCASTON	4·3	- 14·3	6	- 20
TUNBRIDGE WELLS	8·8	—	12	—
MARGATE	9·1	- 13·9	13	- 20
BROADSTAIRS	9·6	—	14	—
RAMSGATE	—	—	—	—
EASTBOURNE	8·9	- 16·5	13	- 23
BRIGHTON	13·5	- 12·7	19	- 18
WORTHING	11·3	—	16	—
BOGNOR	12·8†	—	18†	—
WATERGATE PARK	10·3	—	15	—
WESTBOURNE	13·5†	- 10·8	19†	- 15
VENTNOR HOSPITAL	14·9	- 12·5	20	- 18
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	8·7	- 12·1	12	- 17
SOUTHPORT	10·6	—	15	—
RHYL	10·2	—	15	—
ABERDOVEY	11·2†	—	16†	—
TENBY	—	—	—	—
TORQUAY	19·3	- 4·2	27	- 6
NEWQUAY	17·3	- 7·1	24	- 10
GUERNSEY	14·3†	- 10·1	20†	- 14

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX, No. 31, p. 200 ..	Scilly	—	—	—	—	—	—	—	—	—	1·27	+ 0·67	—	—	—	—
" " " " " " ..	Jersey	—	—	—	—	—	—	—	—	—	0·67	+ 0·08	—	—	—	—
" " " 35, p. 206 ..	Glasgow	—	—	59·9	49·2	54·3	- 0·1	86	—	—	—	—	—	—	—	—
" " " 36, p. 212 ..	Glasgow	—	—	—	—	—	—	—	—	—	1·36	+ 0·49	—	—	—	—
" " " " " " ..	Douglas	—	—	56·5	—	51·2	- 3·1	63	—	—	—	—	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 43.] *Third Series.* WEEK ENDING SATURDAY, OCTOBER 31ST, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 254.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	58	34	51·5	42·4	46·8	3 above	34	+ 6	0	−12	1818	− 90	505	− 85
	1. SCOTLAND, EAST	57	33	52·2	40·4	46·1	2 above	35	+ 6	4	−11	2062	−193	523	−120
	2. ENGLAND, N.E.	58	34	53·8	43·0	48·2	3 above	43	+ 8	0	− 9	2450	− 10	342	−168
	3. ENGLAND, EAST	60	35	56·3	44·9	50·4	4 above	59	+19	0	−10	2954	+103	322	−238
	4. MIDLAND COUNTIES	61	31	53·8	42·0	47·7	2 above	40	+ 3	0	−12	2711	− 91	361	−219
	5. ENGLAND, SOUTH	61	29	56·0	45·7	50·7	3 above	61	+12	0	− 6	3137	+ 11	208	−201
Principal Grazing Districts.	6. SCOTLAND, WEST	57	35	52·1	43·2	47·5	2 above	39	+ 5	0	− 8	2367	− 33	324	−121
	7. ENGLAND, N.W.	60	37	53·0	43·9	48·3	2 above	44	+ 5	0	− 6	2641	+ 7	262	−148
	8. ENGLAND, S.W.	60	32	54·6	43·2	48·7	1 above	47	− 1	0	− 4	3023	+103	162	−152
	9. IRELAND, NORTH	54	24	50·3	39·4	44·7	2 below	30	− 7	7	− 1	2433	−101	293	− 83
	10. IRELAND, SOUTH	59	24	52·1	39·9	45·8	2 below	35	−10	6	0	2895	+ 20	189	− 82
	— CHANNEL ISLANDS	62	43	57·0	48·7	52·7	1 above	75	+ 6	0	− 1	3510	+111	49	− 69

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 254.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	15	2 more	218	+35	56·9*	+18·1	8	− 6	13	−10	981	− 79	25	− 2
	1. SCOTLAND, EAST	6	16	9 more	194	+35	34·8	+ 9·5	17	+ 1	27	+ 1	1101	−110	28	− 3
	2. ENGLAND, N.E.	6	11	5 more	165	+19	27·4	+ 6·8	15	− 4	23	− 6	1191	− 95	30	− 2
	3. ENGLAND, EAST	4	8	2 more	147	+ 1	26·5	+ 6·8	19	− 2	28	− 3	1368	−106	35	− 3
	4. MIDLAND COUNTIES	6	16	10 more	162	+21	31·5	+ 8·9	16	− 1	25	− 1	1186	− 87	30	− 2
	5. ENGLAND, SOUTH	6	19	11 more	165	+28	31·7	+ 9·1	19	− 1	28	− 2	1443	− 42	37	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	24	12 more	201	+36	56·8	+17·5	8	− 9	12	−13	1216	− 46	31	− 1
	7. ENGLAND, N.W.	6	24	15 more	189	+34	38·1	+10·2	11	− 6	16	− 9	1295	+ 47	33	+ 1
	8. ENGLAND, S.W.	7	24	14 more	183	+26	41·7	+10·9	18	− 3	26	− 5	1403	−116	36	− 3
	9. IRELAND, NORTH	6	13	5 more	220	+34	40·8	+11·7	14	− 4	21	− 6	1100	− 69	28	− 2
	10. IRELAND, SOUTH	6	16	7 more	200	+33	41·5	+ 9·4	18	− 3	26	− 5	1222	−112	31	− 3
	— CHANNEL ISLANDS	7	15	6 more	195	+36	31·7	+ 6·2	23	0	33	0	1642	−111	42	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather. Very rainy conditions again prevailed throughout the entire Kingdom, especially during the earlier half of the week, when the heaviest falls of rain were experienced and the intervals of fair weather very brief. During this time thunder and lightning occurred also at several stations in Great Britain and at a few in Ireland.

Temperature was above the mean over England and Scotland, the excess ranging from 1° in England S.W. to 4° in England E. In Ireland it was 2° below the normal. The highest of the maxima were recorded on the 25th, when they ranged from 62° in the Channel Islands and 61° or 60° in several other districts, to 57° in Scotland W. and E. The lowest of the minima were registered on rather variable dates, but mostly on Sunday in Scotland, Thursday in Ireland and the north of England, and on Saturday over the major portion of England. In Ireland they were as low as 24°, but over Great Britain they ranged from 29° in England S., 31° in the Midland Counties, and 33° in Scotland E., to 37° in England N.W., while in the Channel Islands the thermometer only fell to 43°.

Rainfall was again more than the mean in all districts. In almost all parts of Great Britain the fall was more than twice as much as the normal. Falls of an inch or more in one day were again very common in the south-western and north-western districts, and at Chester (Hawarden Bridge) and Newton Rigg no less than 2·24 ins. and 2·04 ins. repectively were measured on the morning of the 27th. The largest aggregates for the week were—3·1 ins. at Swarraton, 3·3 ins. at Newton Rigg, 3·4 ins. at Southampton and Arlington, and 3·8 ins. at Aspatria.

Bright Sunshine was below the mean in nearly all places. The percentage of the possible duration ranged from 33 in the Channel Islands and between 28 and 25 in various other districts, to only 13 and 12 in Scotland N. and W.

Barometer and Wind. Depressions from the Atlantic again travelled over different parts of our area, the centres of some of the systems crossing directly over the Kingdom, and others only skirting our most western and northern coasts. The accompanying winds were generally from between South and West, but they occasionally drew into the Northward in the south-west, and into South-East in the north. In force they were frequently fresh to strong, and at times attained the strength of a gale.

307 | 70 | 90 Wy. & S. Ltd 12 | 02

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°.	Below 42°.	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
C. SCOTLAND, N.	Sumburgh Head	51	36	49·7	43·9	46·7	+ 2·4	33	0	7	1·16	+ 0·17	*	*	*	*
	Stornoway	54	36	52·1	41·3	46·5	+ 2·4	34	2	7	0·86	− 0·34	5·7	− 9·8	9	− 16
	Wick	54	35	52·0	42·4	47·1	+ 2·8	36	0	6	1·13	+ 0·46	*	*	*	*
	Lairg Ⓢ	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Glencarron Ⓢ	54	34	50·7	39·9	45·1	+ 1·9	31	6	7	2·39	+ 0·30	*	*	*	*
	Fort Augustus Ⓢ	54	39	52·2	42·4	47·2	+ 2·7	36	0	7	1·18	+ 0·22	6·2	− 4·1	10	− 6
	Fort William	58	39	52·4	44·3	48·2	+ 2·8	43	0	7	2·01	+ 0·25	10·9	− 2·1	17	− 3
1. SCOTLAND, E.	Nairn	56	33	53·9	38·7	46·1	+ 2·3	43	9	7	0·54	0·00	*	*	*	*
	Aberdeen	54	39	52·6	42·9	47·6	+ 2·8	39	0	5	1·56	+ 0·86	20·1	+ 1·7	31	+ 3
	Braemar Ⓢ	50	36	48·6	39·0	43·7	+ 2·8	25	8	6	2·30	+ 1·42	*	*	*	*
	Ochtertyre Ⓢ	57	36	52·4	39·4	45·7	+ 1·6	37	7	7	2·24	+ 1·27	*	*	*	*
	Leith Ⓢ	57	40	55·0	43·4	49·0	+ 3·0	49	0	6	1·59	+ 1·13	*	*	*	*
	Marchmont Ⓢ	52	35	50·4	39·0	44·5	+ 1·0	30	8	7	1·46	+ 0·67	14·5	− 1·8	22	− 3
2. ENGLAND, N.E.	Alnwick Castle	55	34	52·8	40·7	46·6	+ 1·6	38	4	6	1·86	+ 1·11	*	*	*	*
	Durham	54	38	52·5	41·9	47·0	+ 2·4	35	0	6	1·38	+ 0·71	16·2	− 0·8	25	− 1
	Shields	56	41	53·9	43·3	48·4	+ 2·6	45	0	6	1·21	+ 0·62	*	*	*	*
	Scarborough Ⓜ	58	41	54·6	43·1	48·7	+ 2·3	47	0	6	0·44	− 0·26	14·5	—	22	—
	Spurn Head	57	42	55·1	45·6	50·2	+ 3·0	57	0	5	0·85	+ 0·31	*	*	*	*
	Fulbeck (Lincolnshire)	58	37	53·9	43·2	48·4	+ 3·3	45	0	5	1·06	+ 0·55	20·3	—	30	—
3. ENGLAND, E.	Hillington Ⓜ	60	37	56·6	43·8	50·0	+ 4·1	56	0	6	0·67	+ 0·05	17·1	− 1·2	26	− 2
	Yarmouth	57	36	55·6	44·1	49·7	+ 2·5	54	0	4	0·57	− 0·09	*	*	*	*
	Geldeston	60	39	57·2	44·7	50·8	+ 3·8	62	0	4	0·78	+ 0·18	21·9	+ 0·9	32	+ 1
	Cambridge	60	36	57·3	42·6	49·7	+ 3·6	54	0	5	0·78	+ 0·28	14·9	− 5·4	22	− 8
	Felixstowe	57	40	56·0	46·9	51·3	+ 4·5	65	0	5	0·96	—	26·3†	—	39†	—
	Rothamsted	58	35	54·6	43·3	48·8	+ 3·3	48	0	7	1·47	+ 0·82	18·3	− 2·1	27	− 3
	Shoeburyness	58	42	56·7	48·6	52·5	+ 5·4	74	0	4	0·30	− 0·21	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	54	38	52·3	41·8	46·9	+ 2·4	35	1	7	1·59	+ 0·87	12·6	—	19	—
	Bawtry (Hesley Hall)	57	39	53·3	41·3	47·1	+ 2·1	39	2	5	0·99	+ 0·42	*	*	*	*
	Nottingham	57	38	54·1	42·1	47·9	+ 2·2	41	0	7	1·33	+ 0·79	16·0	—	24	—
	Loughborough	57	39	54·6	42·3	48·3	+ 2·5	44	0	6	1·28	+ 0·71	*	*	*	*
	Colly Weston (Stamford)	31	37	54·7	43·6	49·0	+ 3·1	49	0	6	1·99	+ 1·39	*	*	*	*
	Cheadle Ⓜ	57	38	52·1	41·0	46·4	+ 2·0	35	3	6	1·84	+ 1·10	*	*	*	*
	Birmingham (Edgbaston)	57	39	53·0	42·5	47·6	+ 1·8	39	0	6	1·41	+ 0·79	19·9	—	29	—
	Hereford Ⓜ	58	38	53·9	42·0	47·3	+ 1·6	41	0	7	1·35	+ 0·74	*	*	*	*
	Cirencester	59	31	54·6	39·6	46·9	+ 1·9	44	7	5	1·86	+ 1·16	17·4	− 1·8	26	− 3
	Oxford	60	39	54·9	44·1	49·3	+ 3·3	51	0	5	2·19	+ 1·65	17·9	− 1·3	26	− 2
5. ENGLAND, S.	London	59	37	56·6	45·0	50·6	+ 3·2	60	0	6	1·82	+ 1·25	17·6‡	+ 3·6‡	26‡	+ 5‡
	Swarraton (Alresford) Ⓜ	58	29	53·9	42·4	48·0	+ 2·5	42	0	6	3·11	+ 2·35	*	*	*	*
	Dungeness	59	38	57·6	45·9	51·6	+ 2·8	67	0	5	0·50	− 0·18	20·3	—	30	—
	Hastings (St. Leonards)	58	39	57·0	48·2	52·5	+ 3·9	74	0	6	1·02	+ 0·19	20·9	− 2·1	31	− 3
	Southampton	61	35	57·3	45·4	51·2	+ 2·9	64	0	7	3·40	+ 2·65	16·5	− 4·9	24	− 7
	Portland Bill	59	46	55·7	48·7	52·1	+ 3·0	71	0	6	1·63	—	*	*	*	*
	Shaftesbury Ⓜ	59	39	54·2	44·0	49·0	+ 3·5	49	0	7	1·56	+ 0·72	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	54	37	52·0	43·8	47·8	+ 2·0	41	0	7	2·29	+ 0·54	*	*	*	*
	Glasgow	56	39	51·5	43·4	47·3	+ 2·8	37	0	7	2·01	+ 1·15	7·3	− 4·7	11	− 7
	Cally Ⓢ	57	35	54·2	41·5	47·7	+ 2·4	42	1	7	1·62	+ 0·49	*	*	*	*
	Aspatria	55	39	51·6	43·5	47·4	+ 2·6	38	0	7	3·81	—	8·1	—	12	—
	Douglas (Isle of Man)	54	36	51·3	43·9	47·5	+ 0·8	39	0	6	2·41	+ 1·37	7·3	− 12·3	11	− 19
7. ENGLAND, N.W.	Newton Rigg	53	37	52·0	40·9	46·3	+ 2·5	35	3	7	3·32	—	9·3	—	14	—
	Stonyhurst	56	42	52·2	44·1	48·0	+ 2·7	42	0	6	2·21	+ 1·11	11·4	− 4·6	17	− 7
	Blackpool Ⓜ	57	41	54·3	42·8	48·4	+ 1·8	45	0	6	2·59	+ 1·70	10·0	− 6·1	15	− 9
	Manchester (Prestwich)	58	43	53·5	44·0	48·6	+ 3·1	46	0	7	2·04	+ 1·17	9·2	—	14	—
	Liverpool Obsy. (Bidston)	57	42	52·1	43·6	47·7	+ 0·6	40	0	6	2·80	+ 2·06	11·3	—	17	—
	Chester (Hawarden Bridge)	60	44	54·4	45·3	49·7	+ 2·3	54	0	4	2·78	—	*	*	*	*
	Llandudno Ⓜ	58	41	53·2	45·5	49·2	+ 0·7	50	0	6	1·58	+ 0·72	10·0	− 6·5	15	− 10
	Holyhead	56	41	51·9	45·1	48·4	− 0·5	45	0	6	1·97	+ 1·02	*	*	*	*
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	57	40	54·0	46·7	50·2	+ 0·7	57	0	6	2·63	+ 1·70	13·2	− 6·5	19	− 10
	Clifton	59	41	54·8	44·6	49·6	+ 2·6	53	0	6	1·72	+ 0·88	*	*	*	*
	Bath	60	34	55·9	41·1	48·3	+ 1·0	48	3	6	1·59	+ 0·90	20·3	—	30	—
	Arlington (N. Devon)	58	36	52·9	40·6	46·6	− 0·3	38	4	7	3·37	+ 1·98	*	*	*	*
	Cullompton Ⓜ	60	32	55·1	40·0	47·3	+ 0·9	46	6	7	1·93	+ 1·07	17·8	− 0·5	26	− 1
	Falmouth	57	41	53·8	45·4	49·5	− 0·5	53	0	7	2·91	+ 1·69	22·2	− 0·4	33	− 1
	Plymouth	59	38	55·8	43·9	49·7	+ 0·3	54	0	7	2·32	+ 1·47	16·3	− 4·1	24	− 6
9. IRELAND, N.	Malin Head	52	38	49·4	41·3	45·2	− 2·1	25	2	7	1·14	+ 0·44	*	*	*	*
	Edenfel (Omagh)	51	32	48·9	37·1	42·8	− 1·4	26	14	7	1·14	+ 0·29	*	*	*	*
	Blacksod Point	53	34	51·3	42·3	46·7	− 1·5	33	0	7	2·27	+ 1·07	*	*	*	*
	Markree Castle	53	24	50·7	35·8	43·0	− 2·4	33	17	6	1·30	+ 0·35	13·7	− 3·7	21	− 6
	Armagh	53	34	49·8	39·1	44·3	− 0·9	28	8	5	0·64	0·00	13·2	− 4·6	20	− 7
	Donaghadee	54	35	51·9	41·0	46·3	− 0·4	34	3	6	1·46	+ 0·73	*	*	*	*
10. IRELAND, S.	Dublin	57	34	52·5	40·8	46·5	− 1·1	37	3	5	0·47	− 0·17	15·6	− 6·1	23	− 9
	Birr Castle	55	25	51·1	37·0	43·8	− 2·0	34	14	6	1·10	+ 0·43	19·0	− 0·4	28	− 1
	Kilkenny	55	24	50·9	36·1	43·3	− 3·3	34	17	6	1·43	+ 0·73	*	*	*	*
	Waterford	53	28	51·0	38·7	44·7	− 2·6	33	9	6	2·35	+ 1·46	*	*	*	*
	Roche's Point	58	34	52·7	41·4	46·9	− 2·4	37	2	7	1·20	+ 0·21	*	*	*	*
	Valencia	56	34	52·9	42·7	47·7	− 1·9	40	0	7	1·85	+ 0·55	18·0	− 2·3	27	− 3
	Killarney	59	34	54·0	41·2	47·4	− 0·8	41	2	7	2·58	+ 1·22	*	*	*	*
	Foynes	55	32	51·7	41·4	46·4	− 0·8	33	2	5	1·91	+ 1·01	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	58	45	55·7	48·0	51·7	− 0·2	68	0	7	1·38	+ 0·52	18·9	− 3·7	27	− 5
	Jersey	62	43	58·3	49·4	53·7	+ 2·2	82	0	7	1·62	+ 0·65	27·5	+ 3·0	40	+ 4

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

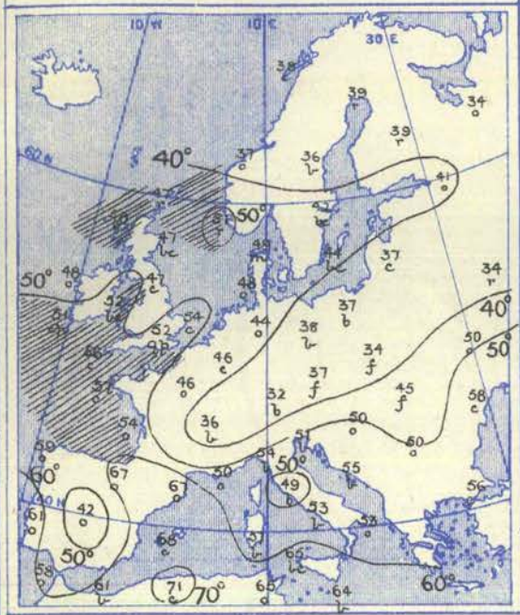
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

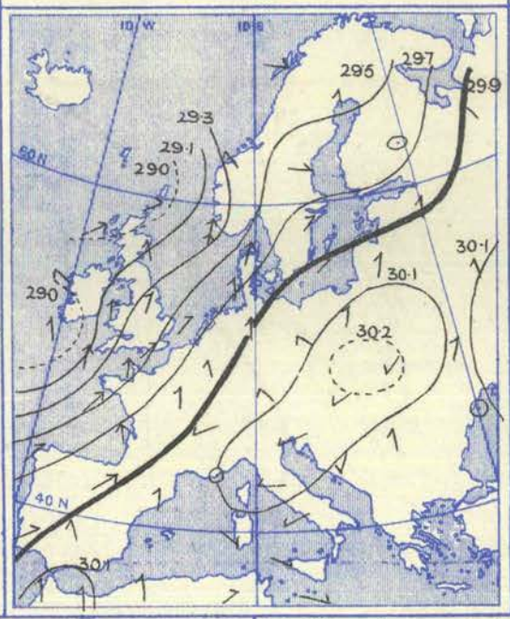
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 25th October, 1903.

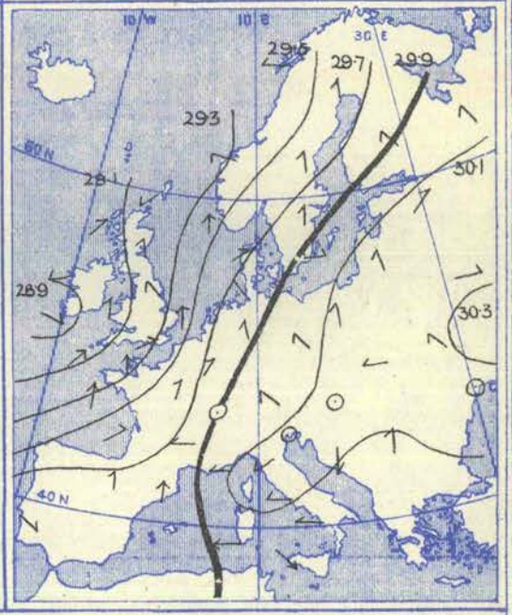
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine in the east of Britain and thence across the Continent to Italy and Malta; also on the east coast of Sweden and on the eastern part of the Baltic. Elsewhere mostly dull and unsettled, with rain in various parts of our Islands, Scandinavia, Finland, and at Moscow. Fog over Bohemia and Poland. Rain becoming general over our Islands, the north and west of France, and in most parts of Scandinavia and Finland. The falls were heavy in some localities, 0·7 in. at Oxford and in London, 0·8 in. at Blacksod Point, 1 in. at Pembroke, and 1·2 ins. at Cap Béarn. Thunderstorms locally in England and France.

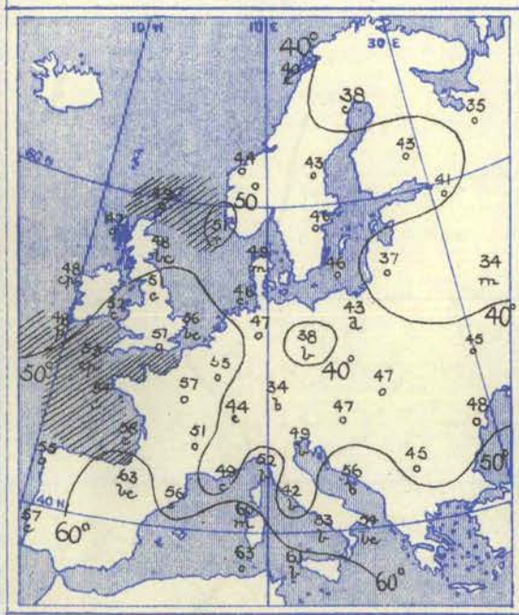
Temperature at 8 a.m. fallen on the Baltic and thence across Germany to Italy, risen nearly everywhere else, decidedly over the south of England, the north of Scotland, and south Russia. Highest readings, 71° at Algiers, 68° at Palma, and 67° and Barcelona and Bilbao. Lowest, 32° at Munich, 34° at Archangel, Moscow, and Warsaw, and 35° at Breslau. Rising during the day to 91° at Algiers, 81° at Nemours, and 75° at Laghouat; to 45° at Hernösand and St. Petersburg, 44° at Christiansund, 40° at Bodö, and 39° at Haparanda.

Wind in morning generally Southerly or South-Westerly over western and north-western Europe, moderate to strong in force in many places, a moderate gale at some of our south-western stations, a fresh gale at Skudesnaes. Over southern and eastern Europe mostly light variable breezes and calms. Increasing to a fresh gale at Holyhead in the afternoon, then falling light over Ireland and the north-west of England. No important change in direction and force elsewhere.

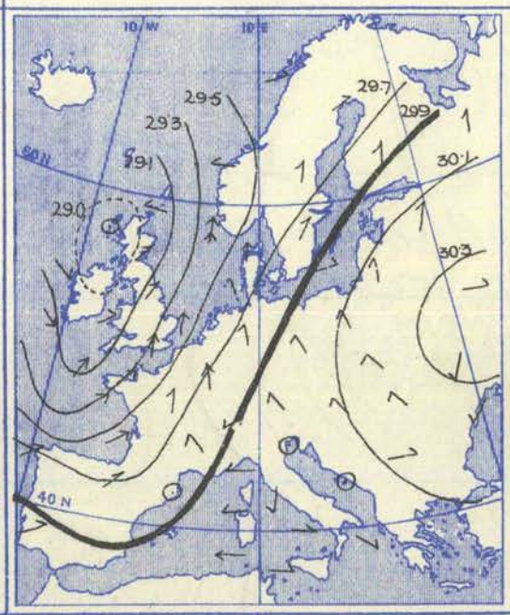
Barometer at 8 a.m. highest, 30·2 ins. and upwards in two anticyclones, one over Poland, the other over south-eastern Russia. Lowest, 29 ins. and under in two disturbances, one passing away beyond the north of Scotland, the other moving in across the south-west of Ireland. In the evening the two anticyclones shown as one, with the barometer above 30·3 ins. in the south-east of Russia. The disturbance over Ireland becoming deeper, with readings below 28·9 ins.

Monday, 26th October, 1903.

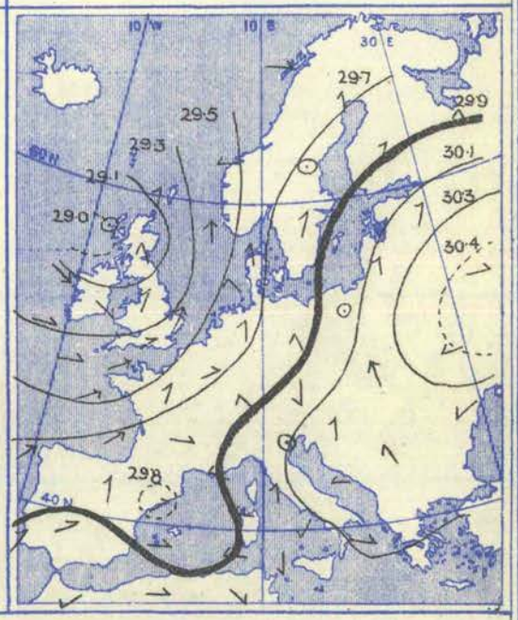
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast over the greater part of our area, with rain in the south-west of Norway and in several parts of the United Kingdom. Fine and bright in Italy. Rain falling later in all regions except Russia, central Europe, and the south of Italy—largest amounts, 1·5 ins. at Lyons and 1·8 ins. at Cette. Thunderstorms occurring in the south of France and at Algiers.

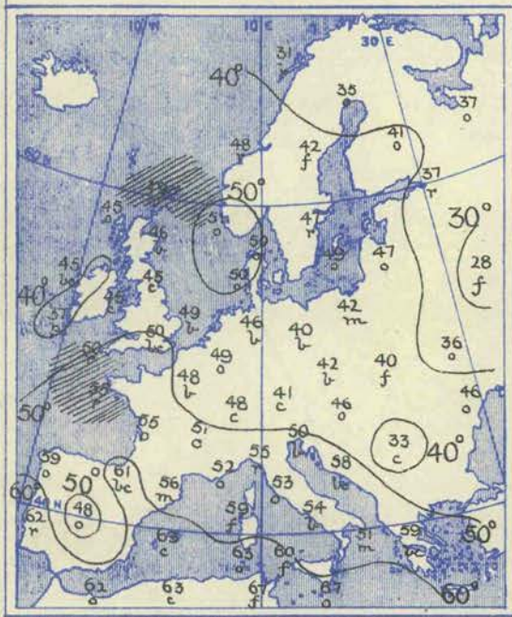
Temperature risen as a whole. Morning readings ranging from above 60° in the extreme south and at Biarritz, to 48° at Madrid and 42° at Rome, and from 57° in London to 35° at Archangel and to 34° at Moscow and Munich. Rising during day to 58° in London and at Paris to about 70° or above at many stations on the shores of the Mediterranean, and to 82° at La Calle. Maxima only 50° in parts of Germany and Austria and in some Irish and Scotch localities.

Wind in morning circulating cyclonically around the western districts of our Islands. Not very strong in force as a whole, but the South-Westerly and Southerly current blowing strongly over England and the north of France and a gale in the south of Norway. Light anticyclonic airs prevailing over Russia and the major portion of Europe. Veering to the Westward over the southern half of these Islands by evening and continuing strong in force, but Southerly gale at Skudesnaes subsiding.

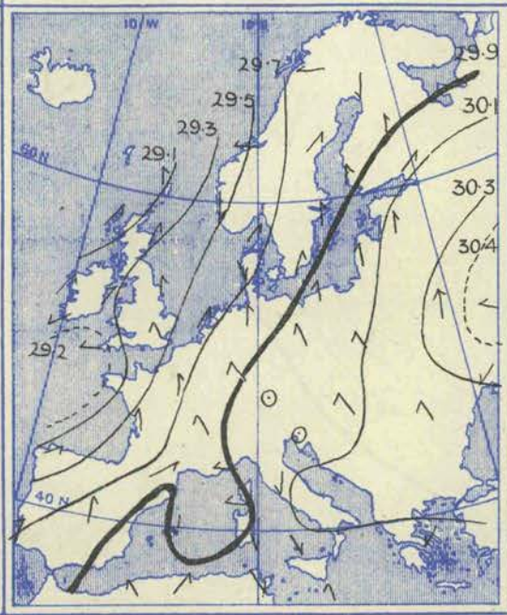
Barometer at 8 a.m. ranging from above 30·3 ins. in an extensive high-pressure over Russia to less than 29·0 ins. in a complex depression having its centre over the western parts of the United Kingdom. Anticyclone increasing slowly in intensity during day, and barometer rising in Ireland and the west of Great Britain, but little change taking place in the relative distribution of pressure.

Tuesday, 27th October, 1903.

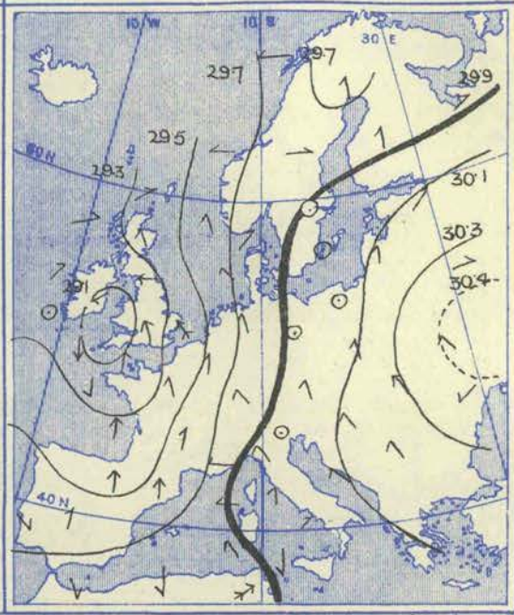
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning very changeable generally, fine and bright locally, but mostly dull and unsettled, with rain falling in various districts in our Islands and in Continental countries, between Lisbon and St. Petersburg. Mist on the Cattegat and Baltic, fog in Austria, at some stations on the western Mediterranean, and at Hernösand and Moscow. Subsequently rain spreading over the whole of our Islands and the greater part of France, many large amounts being registered, ranging up to 1 in. at Sicie, 1·7 ins. at Cherbourg, 1·8 ins. at Liverpool, and 2·6 ins. at Nantes.

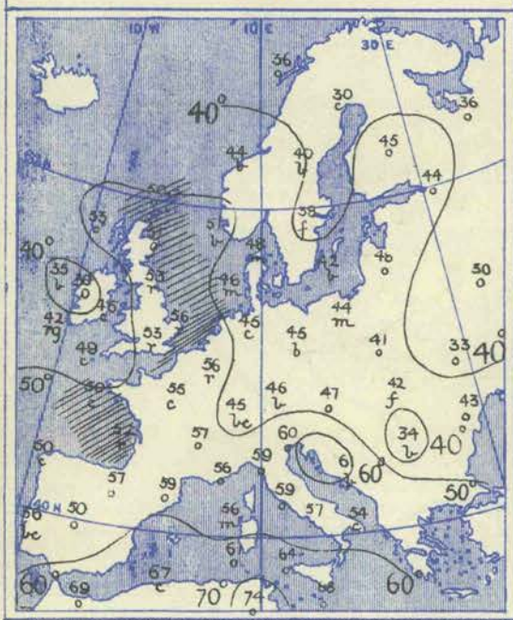
Temperature at 8 a.m. risen over the Spanish and Italian Peninsulas, central Europe, and southern Scandinavia and the Baltic, fallen in nearly all other districts. Highest readings, 67° at Malta and Tunis, 65° at Barcelona, and 64° at Bilbao and La Calle. Lowest, 35° at Charkow and Haparanda, 33° at Hermanstadt, 31° at Bodö, and 28° at Moscow. Over our Islands ranging from 54° at Dungeness and Jersey to 36° at Roche's Point and 33° at Parsonstown. Rising during the day to 82° at Biskra, 81° at Algiers, 79° at Nemours and Tunis, and 75° at Palermo; to 45° at Hernösand and St. Petersburg, 39° at Haparanda, and 36° at Bodö.

Wind in morning very light and variable in the Mediterranean basin and over the south-western portion of the British Isles; a Southerly (South-Easterly to South-Westerly) current prevailing over the rest of our area, blowing fresh or strong in the south-west, between Lisbon and the Straits of Dover, moderate or light in most other localities. Increasing later on our south and south-east coasts, and by evening assuming a cyclonic circulation over England, and blowing a strong breeze or moderate or fresh gale at most of the coast stations. Force decreasing down the Bay and the Spanish coasts, not much change elsewhere.

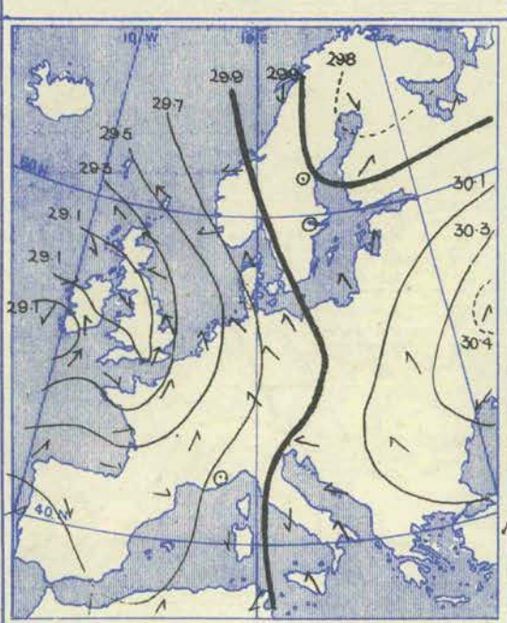
Barometer at 8 a.m. highest, 30·4 ins. and upwards, in an anticyclone over eastern Europe; lowest, 29·1 ins. and under, in a depression passing away beyond the north of Scotland, and 29·2 ins. and less in another approaching the mouth of the English Channel. The anticyclone remaining almost stationary during the day, and the new disturbance moving up the western districts; barometer 29 ins.

Wednesday, 28th October, 1903.

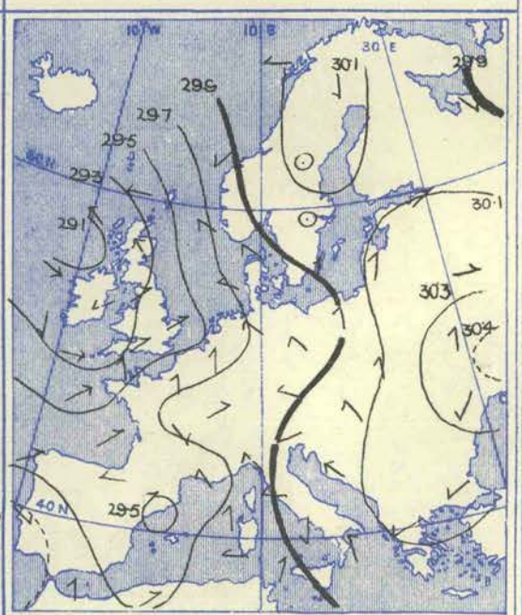
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine generally over the south-west quarter of the British Isles, Scandinavia, and central and south-eastern Europe, dull, overcast skies prevailing elsewhere, with rain in many parts of our Islands and locally in France, Belgium, and Italy. Mist or fog reported at a number of stations from Tunis to Helsingfors. Subsequently rain falling over an extensive region of western Europe heavily, exceeding an inch in many places, ranging up to 1·6 ins. at Gap, 1·7 ins. at Sicié, and 2·6 ins. at Marseilles.

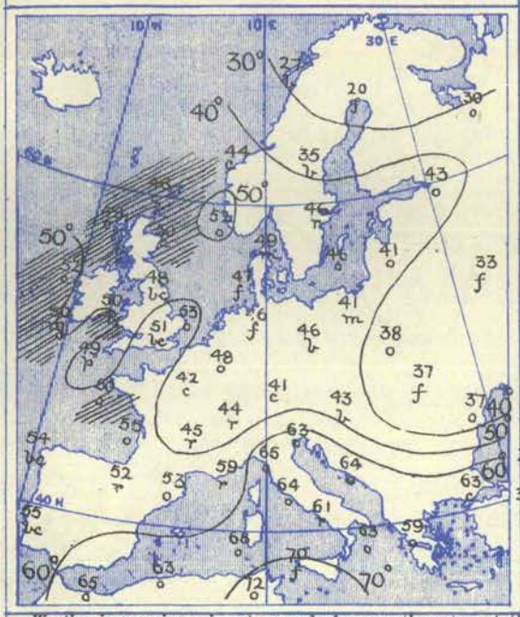
Temperature fallen at nearly all stations in the south-west of our Islands, also in the west of France and of the Spanish Peninsula, and over Denmark, Scandinavia, and in the extreme north and south of Russia. The 8 a.m. readings ranging from 74° at Sfax and 69° at other north African stations to 53° at Oporto and 50° at Corunna and Madrid; over our Islands from 56° at Dungeness and Yarmouth to 35° at Blacksod Point, and 27° at Parsonstown; and in northern and eastern Europe from 48° at Riga to 30° at Haparanda and Moscow. Rising during the day to 86° at La Calle, 82° at Palermo, 81° at Biskra, 73° at Malta, above 55° in several parts of England, to 36° at Bodö, and 34° at Haparanda.

Wind in morning from varied directions, governed by several systems of high and of low pressure. On the east coast of Britain strong to a moderate gale from the South-East, in the north and west of France as strong from the South-West, also blowing strongly from Eastern directions in Tunis. Elsewhere mostly moderate to very light breezes and calms. During the day freshening from various quarters on our western coasts, diminishing on the eastern coasts and down the Bay of Biscay.

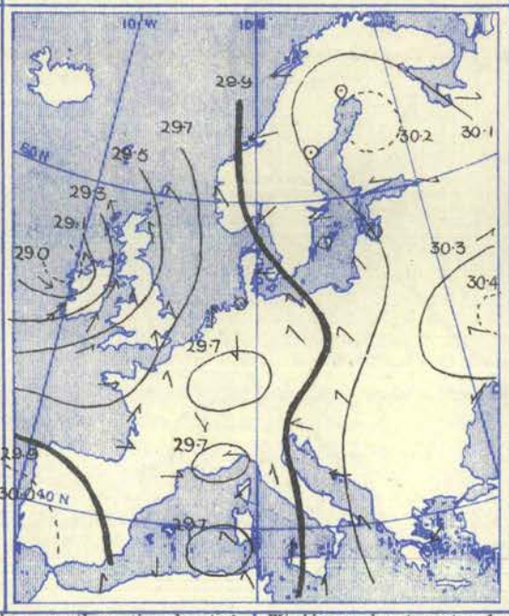
Barometer at 8 a.m., highest, 30·4 ins. and upwards, in an anticyclone occupying south-eastern Europe; lowest, about 29 ins., in two low pressure systems covering the United Kingdom, and below 29·8 ins. over Lapland. No important change during the day in south-eastern Europe, but over the Gulf of Bothnia a new anticyclone forming, barometer above 30·1 ins. Pressure increasing over our Islands, and over the south-west quarter of the Spanish Peninsula. A depression developing on the Gulf of Lyons, the mercury descending to 29·5 ins. at Barcelona.

Thursday, 29th October, 1903.

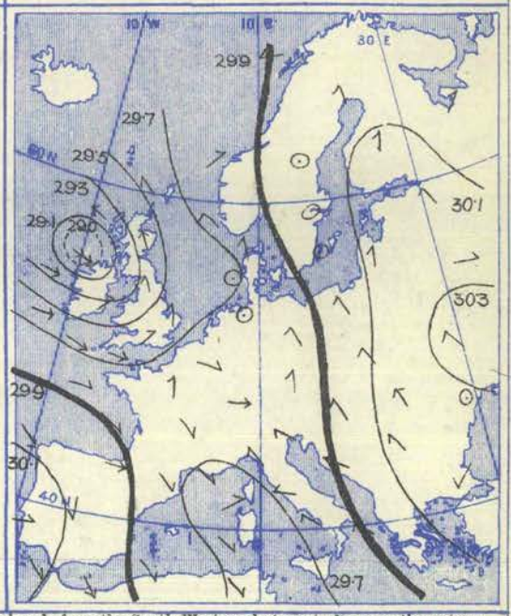
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning rainy at several of our south-western stations, over the south and east of France, and at Naples and Stockholm; misty or foggy at many of the Continental stations, very variable generally, from fine and clear to dull and overcast. During the day rain falling over nearly the whole of the British Isles and the greater part of western and southern Europe and Algeria. Many large amounts reported, ranging up to 1·7 ins. at Algiers, 1·2 ins. at Nice, 2·3 ins. at La Calle, and 2·5 ins. at Legborn. A thunderstorm experienced at Algiers.

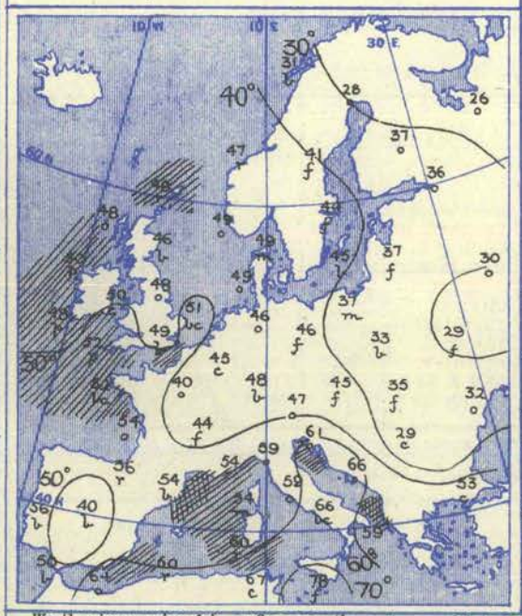
Temperature at 8 a.m. risen over our south-western districts, southern Scandinavia and Denmark, and about the Adriatic, fallen in most other districts. Readings ranging from 77° at Sfax, 72° at Tunis, and 70° at Malta; from 54° at Dungeness and 53° at Yarmouth to 40° at Bath and Malin Head; below 40° in many parts of central, eastern, and northern Europe, 30° at Charkow and Archangel, 27° at Bodö, 21° at Haparanda, and 20° at Uleaborg. Rising in the afternoon to 79° at Tunis and Sfax, 77° at Nemours, 75° at Rome, and 74° at Malta; to between 55° and 59° in many parts of England; to 32° at Haparanda and 31° at Bodö.

Wind in morning strong to a fresh gale from the South-Westward at most of our south-western stations, moderate to strong from the South-Eastward on our eastern and northern coasts. Over the Continental countries direction very variable, Southerly to Easterly prevailing, mostly moderate to light, but a gale at Palermo and Tunis. Later, veering Westerly on our southern and western coasts and maintaining a high strength. The gale at Tunis subsiding, no other important change.

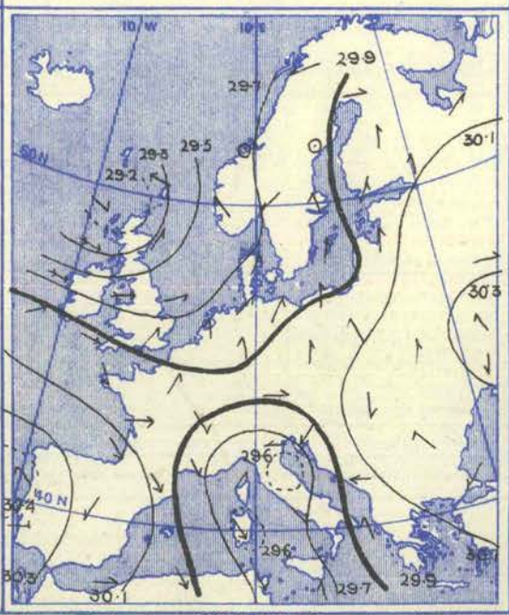
Barometer at 8 a.m. highest, 30·4 ins. at the centre of an anticyclone over southern Russian and above 30·2 ins. in another over Finland. Lowest, 29 ins. and under in the north-west of Ireland, and below 29·7 ins. in each of three disturbances between western Germany and Tunis. Pressure decreasing a little by evening over eastern Europe, and increasing over Portugal to nearly 30·3 ins. Off the north of Ireland the barometer falling to 28·9 ins.

Friday, 30th October, 1903.

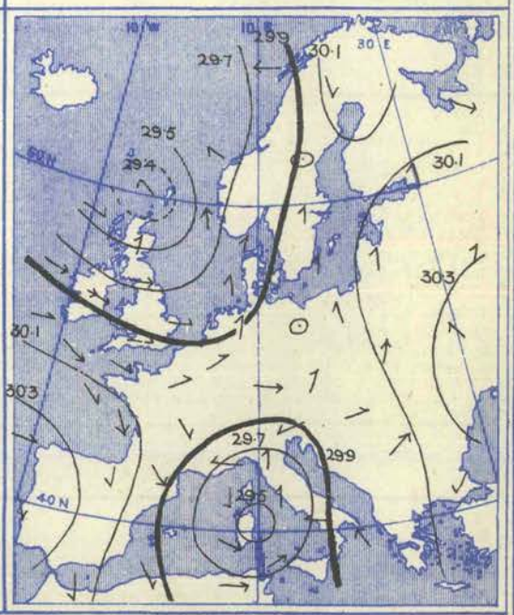
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine over the eastern and inland parts of Britain, the north of France, in the Netherlands, and the southern half of the Spanish Peninsula, very variable over the rest of our area, rain falling at many western and southern stations, at many others the atmosphere misty or foggy, or dull and gloomy. During the day the rain very unequally distributed over western Europe and north Africa, the amounts, as a rule, being small, but 1·2 ins. fell at Turin, and 1·5 ins. at Aumale and La Calle.

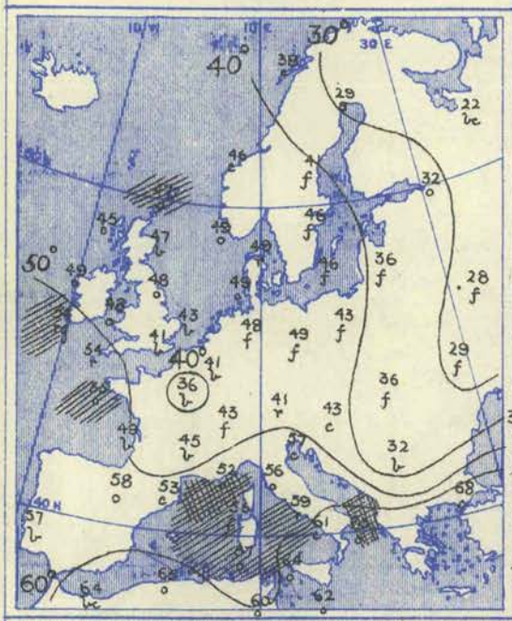
Temperature at 8 a.m. fallen over Russia, the Baltic, southern Europe, and north Africa, changed irregularly over our Islands and western Europe. Highest readings, 73° at Malta, 67° at Tunis, and 66° at Lésina and Naples. At our home stations ranging from 53° at Jersey and Portland Bill to 45° at Parsonstown and Roche's Point. Mostly below 40° over eastern and northern Europe, 28° at Haparanda, 26° at Archangel, and 23° at Charkow. Rising in the afternoon to 78° at Malta, 77° at Nemours, 75° at Palermo, and 73° at Brindisi and Rome, to between 55° and 58° at several stations in our Islands, to 41° at Memel, 36° at St. Petersburg, and 32° at Haparanda.

Wind in morning under the influence of a number of cyclonic and anticyclonic systems. On our western and southern coasts strong breezes and moderate or fresh gales from a Westerly direction; from the Bay of Biscay down to Algeria and Tunis, equally strong from the North-West; and on the Adriatic strong from the South-East. In other regions moderate to light breezes from various quarters. By evening, although still blowing strong to a gale in several localities, the force exhibited a tendency to diminish.

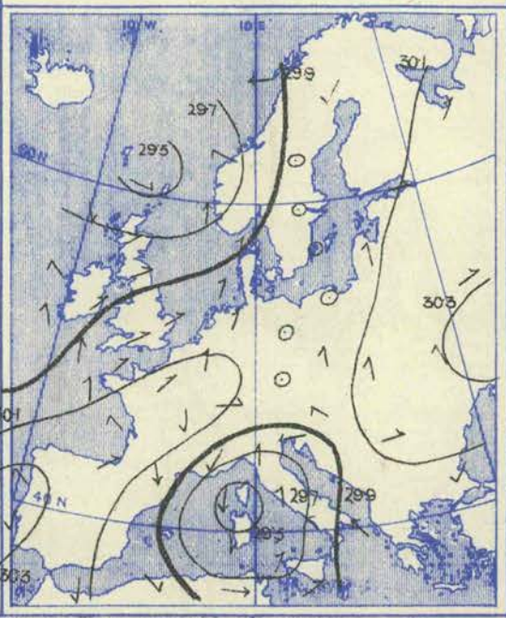
Barometer at 8 a.m. highest, 30·4 ins. and upwards in an anticyclone centred near the coast of Portugal, and above 30·3 ins. in another over south Russia. Lowest, 29·2 ins. and under in a cyclonic system having its centre on the north coast of Scotland, and below 29·6 ins. in two centres of a disturbance occupying the western Mediterranean region. Later the Portuguese anticyclone remained stationary, the Russian one increasing in intensity to above 30·4 ins.; the depression off Scotland filling up slowly, and the Mediterranean one deepening to about 29·5 ins. on the coast of Sardinia.

Saturday, 31st October, 1903.

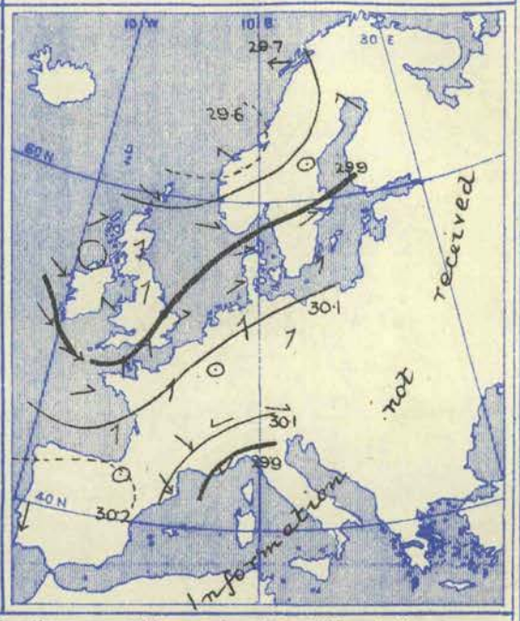
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning extremely variable throughout the area under observation, very fine and bright in several home and foreign localities, in others gloomy or rainy, snow at the head of the Gulf of Bothnia. Foggy at numerous Continental stations, from western France to south Russia and the Gulf of Bothnia. Misty on some parts of our own coasts. During the day rain falling at the majority of stations in western and north-western Europe, in small quantities as a rule, only Biarritz reporting 0·5 in.

Temperature at 8 a.m. fallen within a broad belt extending from our north-western coasts, south-eastward across England and France to Italy, Tunis, and Malta; also over the northern half of Russia; risen generally elsewhere. Highest readings, 68° at Constantinople, 65° at Algiers, and 64° at Oran and Palermo. Over our Islands ranging from 41° over the inland counties of England to 54° at Scilly, Roche's Point, and Valencia. Lowest, 32° and under in eastern Europe, 22° at Archangel. Rising by the afternoon to 72° at Belfort, 66° at Lisbon, and 63° at Rochefort, Biarritz, and Nice, to between 55° and 59° at many stations in our Islands, to 45° at Munich and Hernösand, 37° at Bodö, and 34° at Haparanda.

Wind in morning from many directions, governed by several systems of high and of low pressure. Moderate to light from between North-West, South-West, and South-East over our Islands; strong to a gale from between North and West from the south coast of France to Tunis; strong from South-East at Brindisi, from South at Skudesnaes, and from East at Bodö; calms and light breezes elsewhere. Changing irregularly on our coasts towards evening from South-East into North-West and North in Ireland, fresh or strong in force.

Barometer at 8 a.m., highest, 30·4 ins. and upwards, in an anticyclone centred over south-eastern Russia, and above 30·3 ins. over Portugal. Lowest, below 29·5 ins., in two depressions, one centred off the Shetlands, the other over Corsica; about 29·7 ins. in another near the Irish coast. The anticyclone to the south-west subsequently spreading across France to Germany; the depression near the Shetlands passing up the Norwegian coast, and the western one proving a V-shaped secondary.

IV.—GENERAL NOTES, etc.

About western and north-western Europe the period was marked by a continuation of the generally very unsettled type of conditions which has prevailed so long. All the week atmospheric pressure remained relatively high over Russia, the barometer on some days being up to nearly 30·5 inches. On Thursday another anticyclone began to invade the Spanish Peninsula from the Atlantic, and spreading north-eastwards across France it reached western Germany by the close of the week. The disposition of pressure was thus in favour of the advance of cyclonic disturbances from the upper portion of the Atlantic towards the British Isles. Several such systems reached our coasts, moving on a general north-easterly course, and in some cases attended by secondary irregularities. Barometer readings down to about 29 inches were recorded in some of the centres, but notwithstanding their depth the winds by which they were accompanied were by no means violent, moderate or fresh gales being the strongest reported. As the anticyclone from the Atlantic spread inland a moderately deep disturbance formed over the western basin of the Mediterranean, and strong winds and gales from North-West, South-West, and South-East were felt between the Spanish coast and the Adriatic on Friday and Saturday. The disturbances, however, were characterised more by the wet weather than by the wind they produced. In their immediate neighbourhood rain was both frequent and heavy, many large falls occurring between our Islands and North Africa. There was a great prevalence of mist or fog in many parts of the Continent, more particularly from Austria northward to Sweden and Finland. Frosts were frequent over eastern Europe, but in the west temperature was above the normal for the time of year.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 254.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	5·7	- 3·8	9	- 14	SHEFFIELD	15·4	—	23	—	WESTBOURNE	24·4†	+ 2·8	36†	+ 4
STRATHPEFFER SPA	11·5	- 5·1	18	- 8	WORKSOP	16·2	+ 0·5	24	+ 1	VENTNOR HOSPITAL	21·5	- 1·7	32	- 3
EDINBURGH	17·1	+ 1·9	26	+ 3	THURCASTON	15·7	- 0·9	23	- 1	BOURNEMOUTH	—	—	—	—
COCKLE PARK	16·9	—	26	—	TUNBRIDGE WELLS	18·1	—	27	—	MARLBOROUGH	14·7	- 3·8	22	- 6
NEWCASTLE-ON-TYNE	10·0	—	15	—	MARGATE	22·3	+ 1·8	33	+ 3	SOUTHPORT	12·0	—	18	—
YORK	7·9	- 7·3	12	- 11	BROADSTAIRS	24·0	—	35	—	RHYL	12·9	—	19	—
CROMER	21·2	—	32	—	RAMSGATE	—	—	—	—	ABERDOVEY	15·9†	—	23†	—
LOWESTOFT	22·9	—	34	—	EASTBOURNE	20·5	- 2·0	30	- 3	TENBY	—	—	—	—
DUNMOW	17·8	—	26	—	BRIGHTON	17·3	- 6·0	25	- 9	TORQUAY	23·4	+ 2·7	34	+ 4
					WORTHING	20·7	—	30	—	NEWQUAY	17·6	- 4·8	26	- 7
					BOGNOR	24·8†	—	37†	—	GUERNSEY	22·7†	+ 1·1	33†	+ 2
					WATERGATE PARK	19·0	—	28	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. xx, No. 30, p. 176 ..	Cambridge	—	—	—	51·6	58·4	- 3·2	115	—	—	—	—	—	—	—	—
„ „ „ 33, p. 194 ..	Fulbeck	67	—	63·0	—	—	—	—	—	—	—	—	—	—	—	—
„ „ „ „ „ ..	Aspatria	—	46	—	47·9	54·5	- 2·1	88	—	—	—	—	—	—	—	—
„ „ „ 34, p. 200 ..	Aspatria	—	—	—	49·3	55·4	- 0·6	94	—	—	—	—	—	—	—	—
„ „ „ 35, p. 206 ..	Malin Head	—	—	—	—	—	—	—	—	—	1·41	- 0·67	—	—	—	—

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 44.] *Third Series.* WEEK ENDING SATURDAY, NOVEMBER 7TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 260.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	55	27	50·3	40·7	45·6	3 above	31	+ 7	4	- 9	1819	- 83	509	- 94
	1. SCOTLAND, EAST	56	21	50·2	37·1	43·7	1 above	32	+ 7	14	- 3	2094	-186	537	-123
	2. ENGLAND, N.E.	55	26	51·6	39·3	45·4	1 above	35	+ 5	8	- 3	2485	- 5	350	-171
	3. ENGLAND, EAST	57	27	52·7	38·9	45·9	1 above	40	+ 5	9	- 2	2994	+108	331	-240
	4. MIDLAND COUNTIES	58	25	50·6	36·2	43·4	1 below	34	+ 1	16	+ 2	2745	- 90	377	-217
	5. ENGLAND, SOUTH	58	31	53·1	41·9	47·5	1 above	39	- 5	0	- 7	3176	+ 6	208	-208
Principal Grazing Districts.	6. SCOTLAND, WEST	56	27	50·0	39·1	44·5	0 (average)	30	0	8	- 2	2397	- 33	332	-123
	7. ENGLAND, N.W.	56	25	51·0	38·9	44·9	1 below	33	- 2	9	+ 2	2674	+ 5	271	-146
	8. ENGLAND, S.W.	57	30	53·1	42·0	47·5	0 (average)	39	- 5	0	- 5	3062	+ 98	162	-157
	9. IRELAND, NORTH	56	29	51·5	39·3	45·4	0 (average)	35	+ 2	8	- 1	2468	- 99	301	- 84
	10. IRELAND, SOUTH	59	26	52·9	38·3	45·6	1 below	41	- 1	10	+ 3	2936	+ 19	199	- 79
	— CHANNEL ISLANDS	58	44	55·1	48·2	51·7	1 above	68	+ 4	0	- 1	3578	+115	49	- 70

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 260.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	5	7 less	221	+33	57·4	+17·4	11	0	18	0	992	- 79	25	- 2
	1. SCOTLAND, EAST	2	2	6 less	196	+33	35·0	+ 9·0	19	+ 4	31	+ 7	1120	-106	28	- 3
	2. ENGLAND, N.E.	1	3	3 less	166	+16	27·7	+ 6·5	26	+ 9	41	+14	1217	- 86	31	- 2
	3. ENGLAND, EAST	1	3	3 less	148	- 2	26·8	+ 6·5	22	+ 3	35	+ 5	1390	-103	35	- 3
	4. MIDLAND COUNTIES	1	3	3 less	163	+18	31·8	+ 8·6	21	+ 5	32	+ 7	1207	- 82	30	- 2
	5. ENGLAND, SOUTH	1	2	5 less	166	+26	31·9	+ 8·6	25	+ 6	39	+10	1468	- 36	37	- 1
Principal Grazing Districts.	6. SCOTLAND, WEST	3	5	7 less	204	+35	57·3	+16·8	17	+ 2	28	+ 3	1233	- 44	31	- 1
	7. ENGLAND, N.W.	2	6	3 less	191	+31	38·7	+ 9·9	27	+12	41	+19	1322	+ 59	33	+ 2
	8. ENGLAND, S.W.	2	6	4 less	185	+24	42·3	+10·5	33	+17	50	+25	1436	-100	36	- 3
	9. IRELAND, NORTH	2	2	6 less	222	+31	41·0	+11·0	24	+ 8	38	+13	1124	- 61	28	- 2
	10. IRELAND, SOUTH	2	3	6 less	202	+31	41·8	+ 8·8	33	+14	51	+22	1255	- 98	32	- 3
	— CHANNEL ISLANDS	2	3	6 less	197	+33	32·0	+ 5·6	30	+10	46	+15	1672	-101	43	- 3

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather. Soon after the commencement of the period the weather became fine and dry throughout our Islands, with much sunshine during the daytime, but with a good deal of fog during the night and early morning.

Temperature differed but slightly from the mean as a whole, but was 2° above it in Scotland N. The highest of the maxima, which were recorded early in the week, ranged from 59° in Ireland S., and 58° in the Midland Counties, England S., and the Channel Islands, to 55° in Scotland N. The lowest of the minima, which were registered about the middle of the period, ranged from 21° in Scotland E., 25° in the Midland Counties and England N.W., and 26° in England N.E. and Ireland S., to 31° in England S. and to 44° in the Channel Islands.

Rainfall was considerably less than the mean in all districts.

Bright Sunshine exceeded the mean in all parts of the Kingdom except Scotland N. The percentage of the possible duration ranged from 51 in Ireland S., 50 in England S.W., and 46 in the Channel Islands, to 28 in Scotland W., and to 18 in Scotland N.

Barometer and Wind. During the early days of the week the United Kingdom was still under the influence of depressions travelling north-eastwards and eastwards, but after Tuesday a large anticyclone moved eastward from the Atlantic, and during the remainder of the week its central portion travelled slowly eastwards directly over Ireland and England. The Southerly and South-Westerly winds, which were prevalent as the week commenced, soon gave place to Northerly and Easterly winds over the southern half of our Islands, and to Westerly winds in the most northern districts.

370/2007r. Wy. & S. Ltd
11 | 03

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	51	40	50·0	44·3	47·2	+ 3·8	36	0	4	0·90	− 0·06	*	*	*	*
	Stornoway	54	40	51·3	42·4	47·0	+ 3·5	35	0	3	0·39	− 0·81	11·0	− 1·8	18	− 3
	Wick	52	30	50·6	38·6	44·6	+ 1·2	32	10	4	0·40	− 0·26	*	*	*	*
	Lairg Ⓢ	55	27	50·4	37·9	44·2	+ 3·0	33	11	2	0·16	− 0·67	*	*	*	*
	Glencarron Ⓢ	50	35	48·8	41·0	44·9	+ 2·6	25	3	5	0·95	− 1·20	*	*	*	*
	Fort Augustus Ⓢ	54	32	50·8	39·4	45·1	+ 1·8	33	7	3	0·29	− 0·69	6·5	− 1·1	11	− 2
	Fort William	53	35	50·1	41·6	45·9	+ 1·3	29	1	3	0·63	− 1·14	6·6	− 3·4	11	− 6
1. SCOTLAND, E.	Nairn	53	26	51·1	37·9	44·5	+ 1·7	35	11	3	0·10	− 0·43	*	*	*	*
	Aberdeen	54	27	49·7	36·4	43·1	− 0·6	31	16	2	0·14	− 0·59	23·6	+ 7·8	39	+ 13
	Braemar Ⓢ	51	21	48·0	35·7	41·9	+ 1·9	17	27	0	0·00	− 0·86	*	*	*	*
	Ochtertyre Ⓢ	55	27	51·3	35·0	43·2	+ 0·4	38	20	4	0·08	− 0·91	*	*	*	*
	Leith	56	29	51·6	40·3	46·0	+ 1·1	35	5	3	0·19	− 0·28	*	*	*	*
	Marchmont Ⓢ	53	32	49·7	37·0	43·4	+ 0·9	31	14	1	0·36	− 0·42	21·3	+ 6·8	34	+ 11
2. ENGLAND, N.E.	Alnwick Castle	54	28	51·8	37·8	44·8	+ 0·6	37	12	1	0·22	− 0·54	*	*	*	*
	Durham	54	27	50·8	37·7	44·3	+ 0·6	34	12	1	0·14	− 0·50	28·6	+ 13·8	45	+ 22
	Shields	55	32	51·7	40·7	46·2	+ 1·3	35	4	1	0·30	− 0·25	*	*	*	*
	Scarborough Ⓜ	55	28	52·6	37·5	45·1	− 0·3	41	13	2	0·28	− 0·40	22·6	—	36	—
	Spurn Head	55	37	51·6	43·0	47·3	+ 1·3	37	0	1	0·35	− 0·15	*	*	*	*
	Fulbeck (Lincolnshire)	54	26	51·0	38·8	44·9	+ 1·2	34	9	1	0·33	− 0·16	26·5	—	41	—
3. ENGLAND, E.	Hillington Ⓜ	54	27	51·8	35·5	43·7	− 1·0	39	18	2	0·37	− 0·25	25·7	+ 9·8	40	+ 15
	Yarmouth	55	33	51·9	38·6	45·3	− 0·6	37	10	1	0·24	− 0·41	*	*	*	*
	Geldeston	56	29	53·8	37·1	45·5	− 0·2	45	14	1	0·26	− 0·32	23·6	+ 5·3	37	+ 8
	Cambridge	55	28	53·8	36·3	45·1	0·0	46	16	1	0·26	− 0·21	15·3	− 2·6	24	− 4
	Felixstowe	57	36	53·5	43·7	48·6	+ 3·1	46	0	1	0·21	—	20·1†	—	31†	—
	Rothamsted	54	30	51·0	37·6	44·3	− 0·2	35	12	1	0·26	− 0·38	18·7	+ 0·6	29	+ 1
	Shoeburyness	57	38	53·4	43·7	48·6	+ 2·7	46	0	1	0·15	− 0·35	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	55	33	51·8	39·0	45·4	+ 1·7	36	8	1	0·32	− 0·35	34·6	—	55	—
	Bawtry (Hesley Hall)	53	25	50·0	35·3	42·7	− 1·6	33	19	1	0·25	− 0·25	*	*	*	*
	Nottingham	54	28	49·1	34·7	41·9	− 2·8	20	31	1	0·35	− 0·17	5·7	—	9	—
	Loughborough	55	26	50·0	34·0	42·0	− 2·8	22	22	2	0·19	− 0·34	*	*	*	*
	Colly Weston (Stamford)	54	26	51·7	35·3	43·5	− 1·1	39	19	2	0·25	− 0·32	*	*	*	*
	Cheadle Ⓜ	53	34	50·6	39·1	44·9	+ 1·4	32	8	1	0·58	− 0·13	*	*	*	*
	Birmingham (Edgbaston)	52	32	50·1	39·1	44·6	− 0·1	30	8	1	0·22	− 0·36	19·2	—	30	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	58	29	51·1	34·7	42·9	− 2·5	37	20	2	0·19	− 0·41	*	*	*	*
	Cirencester	53	29	50·4	33·9	42·2	− 1·9	35	23	2	0·31	− 0·37	22·3	+ 5·7	34	+ 9
	Oxford	54	31	50·7	37·0	43·9	− 0·7	34	14	1	0·26	− 0·27	20·3	+ 3·5	31	+ 5
5. ENGLAND, S.	London	56	36	53·6	40·3	47·0	+ 0·7	42	5	1	0·22	− 0·32	9·2‡	− 2·4‡	14‡	− 4‡
	Swarraton (Alresford) Ⓜ	55	31	51·4	35·0	43·2	− 1·5	38	20	1	0·38	− 0·36	*	*	*	*
	Dungeness	58	40	54·3	45·3	49·8	+ 2·1	55	0	1	0·11	− 0·53	26·1	--	40	—
	Hastings (St. Leonards)	56	41	53·8	44·9	49·4	+ 1·9	52	0	1	0·08	− 0·70	31·4	+ 11·2	48	+ 17
	Southampton	56	38	54·4	42·0	48·2	+ 0·9	43	0	1	0·30	− 0·44	27·2	+ 8·8	42	+ 14
	Portland Bill	56	41	53·4	45·6	49·5	+ 1·0	53	0	1	0·09	—	*	*	*	*
	Shaftesbury Ⓜ	54	37	50·6	40·3	45·5	+ 1·0	32	5	2	0·34	− 0·47	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	33	51·8	41·4	46·6	+ 1·6	35	2	4	0·72	− 1·10	*	*	*	*
	Glasgow	52	35	49·0	41·8	45·4	+ 1·6	25	1	3	0·14	− 0·73	7·1	− 2·4	12	− 4
	Cally Ⓢ	52	30	48·1	35·9	42·0	− 2·0	17	17	3	0·43	− 0·74	*	*	*	*
	Aspatria	54	27	48·2	36·1	42·2	− 1·6	26	17	1	0·41	—	20·9	—	33	—
	Douglas (Isle of Man)	56	34	52·8	40·1	46·5	+ 0·4	39	5	2	0·75	− 0·30	24·1	+ 6·7	38	+ 11
7. ENGLAND, N.W.	Newton Rigg	54	25	51·0	35·2	43·1	+ 0·7	36	19	1	0·31	—	27·6	—	44	—
	Stonyhurst	53	31	48·0	38·1	43·1	− 1·4	24	11	2	0·78	− 0·28	21·6	+ 8·2	34	+ 13
	Blackpool Ⓜ	54	30	51·3	38·7	45·0	− 0·6	35	9	2	0·80	− 0·05	23·7	+ 10·1	37	+ 16
	Manchester (Prestwich)	54	31	51·0	38·0	44·5	− 0·1	34	11	2	0·85	+ 0·02	10·1	—	16	—
	Liverpool Obsy. (Bidston)	53	34	48·9	41·0	45·0	− 0·9	25	3	2	0·53	− 0·16	34·6	—	38	—
	Chester (Hawarden Bridge)	54	30	49·4	37·5	43·5	− 2·9	29	13	2	0·44	—	*	*	*	*
	Llandudno Ⓜ	56	37	53·7	42·3	48·0	+ 0·3	42	0	2	0·42	− 0·38	32·2	+ 17·6	50	+ 28
	Holyhead	54	38	52·6	43·6	48·1	− 0·1	43	0	2	0·56	− 0·36	*	*	*	*
	Bettws-y-Coed	55	31	53·0	35·3	44·2	− 3·1	44	19	2	0·31	—	31·0	—	48	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	56	42	53·6	45·4	49·5	+ 0·6	53	0	2	1·17	+ 0·27	34·8	+ 17·4	54	+ 27
	Clifton	56	35	51·5	40·5	46·0	+ 0·1	34	4	2	0·55	− 0·25	*	*	*	*
	Bath	56	31	52·7	36·1	44·4	− 2·1	42	17	1	0·39	− 0·30	23·7	—	37	—
	Arlington (N. Devon)	56	33	51·9	40·4	46·2	+ 0·4	36	4	2	0·71	− 0·65	*	*	*	*
	Cullompton Ⓜ	56	30	53·5	39·4	46·5	+ 0·8	42	7	2	0·60	− 0·23	28·0	+ 12·2	43	+ 19
	Falmouth	57	41	53·6	46·4	50·0	+ 0·7	56	9	2	0·34	− 0·87	34·7	+ 14·7	53	+ 22
	Plymouth	57	39	54·7	45·6	50·2	+ 1·7	57	0	2	0·39	− 0·44	38·4	+ 20·2	58	+ 31
9. IRELAND, N.	Malin Head	54	39	51·3	44·3	47·8	+ 1·3	41	0	3	0·08	− 0·64	*	*	*	*
	Edenfel (Omagh)	53	31	50·4	37·1	43·8	+ 0·4	33	14	4	0·37	− 0·47	*	*	*	*
	Blacksod Point	54	41	52·6	42·4	47·5	+ 0·2	39	0	2	0·25	− 0·95	*	*	*	*
	Markree Castle	56	31	50·9	34·7	42·8	− 2·0	36	20	1	0·28	− 0·65	24·6	+ 9·2	39	+ 15
	Armagh	56	29	50·6	36·7	43·7	− 0·7	34	15	1	0·14	− 0·51	23·2	+ 7·2	37	+ 11
	Donaghadee	54	35	52·9	40·3	46·6	+ 0·7	39	5	2	0·21	− 0·52	*	*	*	*
10. IRELAND, S.	Dublin	55	33	52·2	39·9	46·1	− 0·7	38	6	2	0·24	− 0·36	36·5	+ 17·0	57	+ 27
	Birr Castle	55	26	52·7	33·7	43·2	− 1·8	43	23	1	0·07	− 0·61	27·4	+ 9·7	43	+ 15
	Kilkenny	54	30	52·1	33·6	42·9	− 3·1	42	24	1	0·08	− 0·61	*	*	*	*
	Waterford	55	34	52·4	38·0	45·2	− 1·4	39	11	1	0·35	− 0·55	*	*	*	*
	Roche's Point	55	38	53·6	40·9	47·3	− 1·2	42	3	1	0·19	− 0·85	*	*	*	*
	Valencia	56	35	54·4	40·4	47·4	− 1·6	45	4	2	0·52	− 0·78	33·7	+ 15·3	52	+ 24
	Killarney	59	32	55·5	39·7	47·6	+ 0·3	49	6	3	0·80	− 0·59	*	*	*	*
	Foynes	55	34	50·4	39·8	45·1	− 1·4	31	6	1	0·46	− 0·47	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	57	46	54·9	48·3	51·6	+ 0·3	67	0	2	0·61	− 0·22	29·9	+ 9·1	45	+ 14
	Jersey	58	44	55·3	48·1	51·7	+ 1·2	68	0	1	0·05	− 0·90	31·6	+ 10·1	47	+ 15

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

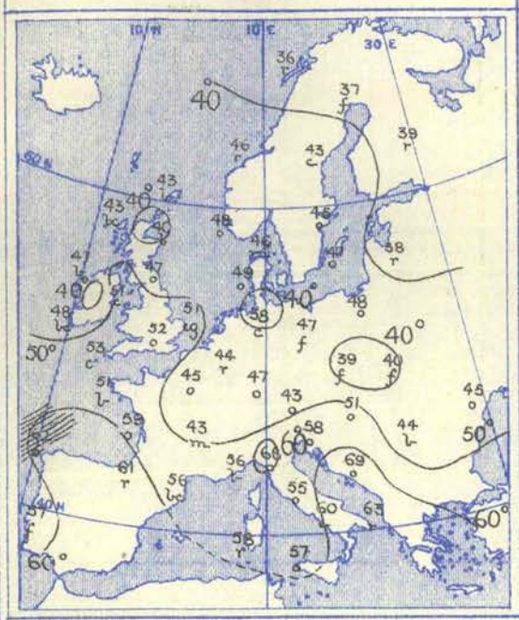
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

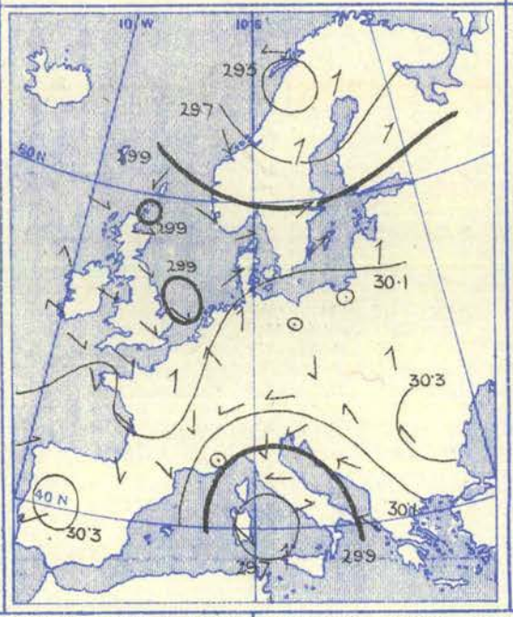
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 1st November, 1903.

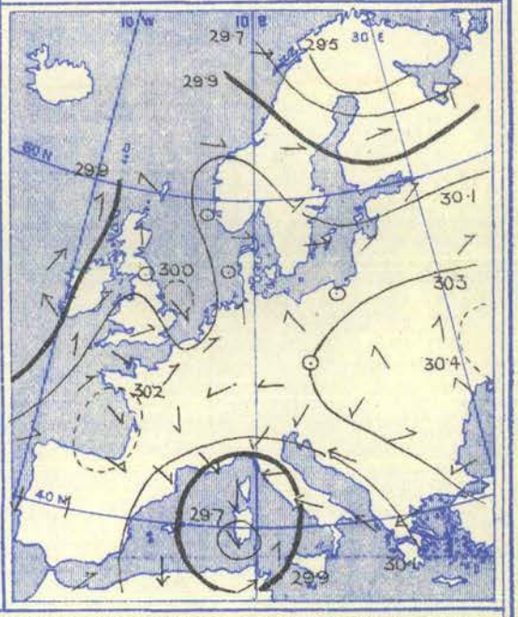
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in Ireland and Scotland, but cloudy or dull in nearly all other parts of Europe; fog reported at several of the Danish, German, and Austrian stations, and rain in many parts of Scandinavia and northern Russia, as well as at Biarritz, Vigo, and Brindisi. Rain falling later in the western and northern parts of the Kingdom generally, heavily at some of the south-western stations, considerable quantities reported also in Italy, as much as 1·5 ins. at Turin.

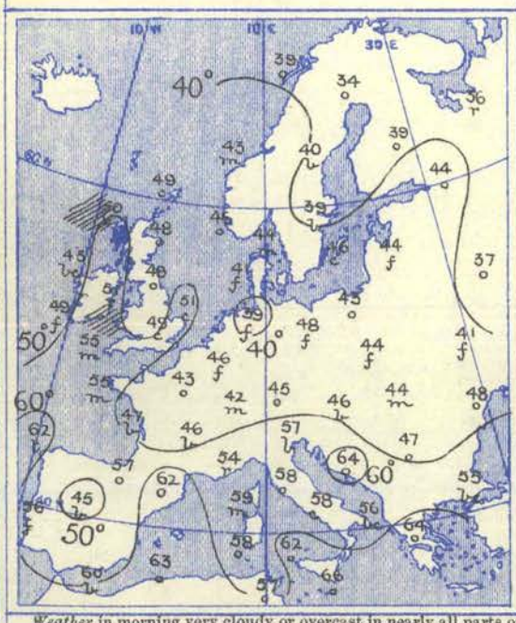
Temperature risen over England, France, and the Spanish Peninsula, fallen in most other regions. Morning readings highest, 69° at Lésina, 66° at Leghorn, and 63° at Brindisi. Slightly above 60° in many parts of southern Europe; slightly above 50° over the greater part of England. Lowest, (1) 35° at Parsonstown and 36° at Wick; (2) 36° at Bodö and 37° at Haparanda. Rising during day to between 50° and 55° over the United Kingdom generally, and to 58° at Dungeness and Jersey; exceeding 65° in most parts of southern Europe, and reaching 73° at Madrid.

Wind light to moderate from the Westward or North-Westward over Great Britain and the north and west of France, and strong from the same quarters on the Norwegian coast. Light from the South-Eastward in the Netherlands, and from the South-Westward over Denmark, Sweden, and northern Russia. South-Easterly in the west and south of Ireland, variable over southern Europe. Southerly winds setting in later over the western and northern parts of our Islands generally, and blowing strongly in the west of Ireland.

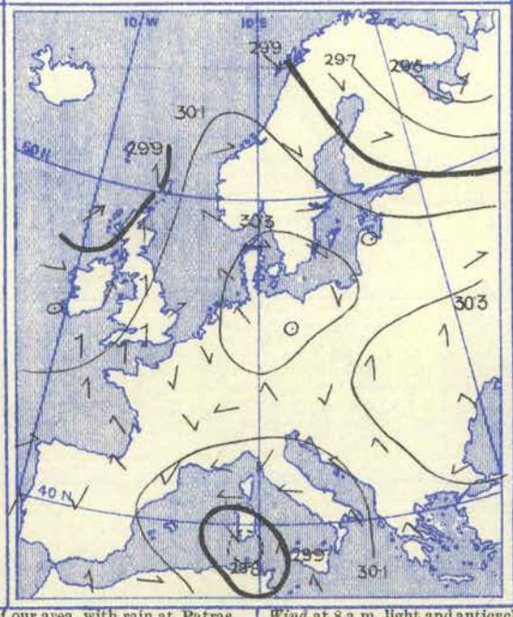
Barometer, highest, 30·3 ins. and upwards to 30·2 ins. in two anticyclones, one lying over the Spanish Peninsula and the other over eastern and central Europe. Lowest, 29·5 ins. and less in a well marked depression with its centre over the north of Scandinavia; 29·7 ins. and less in another disturbance between Sardinia and Sicily. Scandinavian depression subsequently travelling away to the north-eastward; new disturbances appearing off our own western coasts in evening.

Monday, 2nd November, 1903.

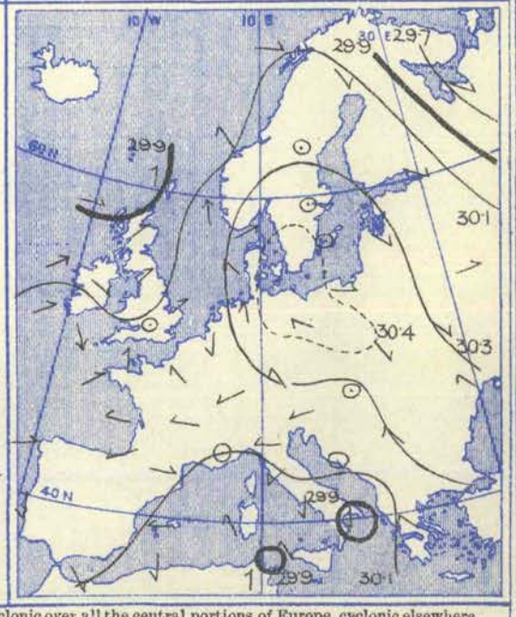
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning very cloudy or overcast in nearly all parts of our area, with rain at Patras, in the Riviera, at several of our own western and northern stations, and also at Archangel. Much fog prevailing over Germany, the Low Countries, Denmark, at Valencia Island, and on the coast of Portugal, and thunder reported at Corunna. Rain experienced later in almost all parts of the United Kingdom, at Bodö, and in several Italian localities, but very little elsewhere. Fog clearing off by evening.

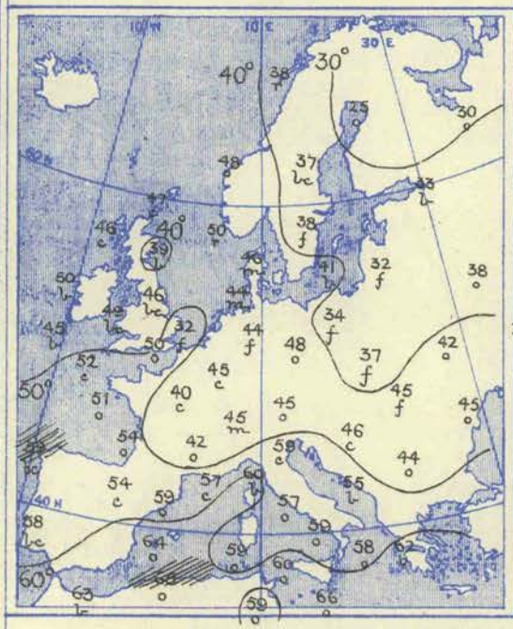
Temperature fallen generally, but risen in Scotland. Morning readings highest, 66° at Malta, 64° at Athens and Brindisi, 63° at Algiers, and 62° at Barcelona and Leghorn. Lowest, (1) 33° at Kharkov, 37° at Moscow, (2) 34° at Haparanda, (3) 36° at Münster, 39° at Cuxhaven, (4) 40° at Limoges, and 45° at Madrid. Rising during day to 57° at Scilly and Dungeness, above 60° at some French stations, and to 70° or above at many of those bordering the Mediterranean. Thermometer only touching 53° at Belfort, 52° at Nottingham, 50° at Berlin, and 48° at Munich.

Wind at 8 a.m. light and anticyclonic over all the central portions of Europe, cyclonic elsewhere. A complete circulation of little force shown over the Mediterranean, moderate Westerly breezes in northern Europe, and fresh Southerly winds along the west coasts of Great Britain. Latter becoming transferred to the east coasts of England and Scotland by evening, and wind veering to the North-Westward in Wales. Little change over our area as a whole.

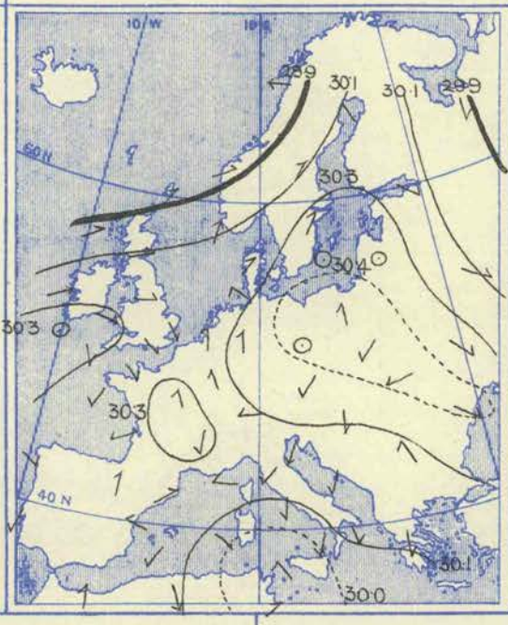
Barometer in morning ranging from above 30·4 ins. in the south-east of Russia, above 30·3 ins. in a large area embracing all the central countries, and above 30·2 ins. in a band extending thence to beyond the Spanish Peninsula, to about 29·8 ins. (1) in a "V" shaped depression, having its minimum to the northward of the Hebrides, and (2) in another system near Cagliari, and to below 29·5 ins. in a third over the White Sea. Depressions travelling eastwards later, and a third system apparently forming near Brindisi.

Tuesday, 3rd November, 1903.

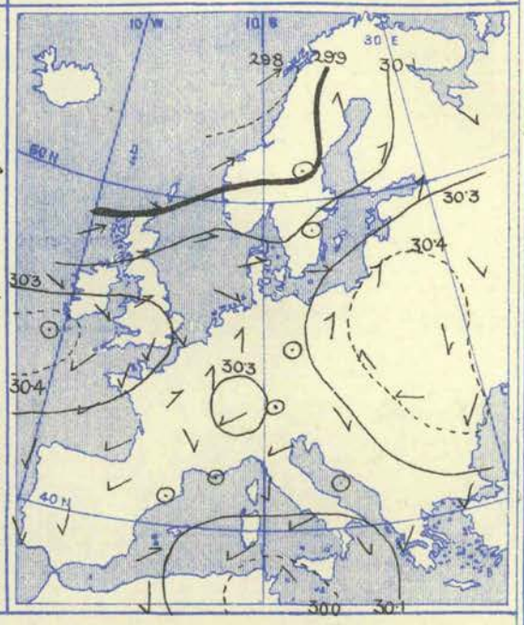
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in nearly all parts of the United Kingdom, but dull with drizzling rain in the south-east. Cloudy or overcast on the Continent, with fog at Stockholm and in the central countries, and rain in Norway and the Netherlands. Rain falling later in the most northern regions of Europe and on various shores of the Mediterranean. Largest amounts, 0·83 in. at Hernösand and 0·55 in. at Malta.

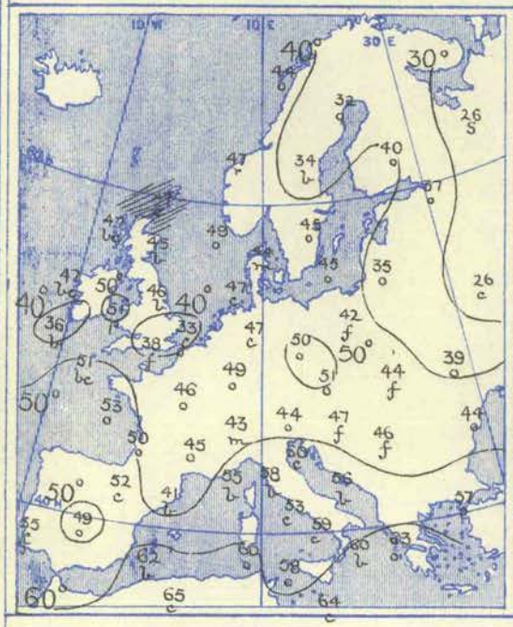
Temperature fallen in most places. Morning readings highest, 66° at Malta, 64° at Palma, 63° at Algiers, and 62° in Greece. Lowest, (1) 25° at Uleaborg, 30° at Archangel, (2) 31° at Munich, (3) 35° at Limoges, and (4) 38° at Parsonstown. Maxima during day below 55° in most parts of our Islands, and below 50° in the east of France and in parts of Germany and Austria, but as high as 70° at Nice and Palermo and some Spanish, Algerian, and Grecian stations. Falling to the freezing point over central England at night, and to two points below it at Gap.

Wind in morning showing a moderate to light cyclonic circulation over the Mediterranean, and a Westerly to South-Westerly movement of moderate to strong winds in the extreme north-west of Europe. Light and anticyclonic in all the intervening regions, but fresh or strong Northerly breezes prevailing in the north of Russia. Very little change later.

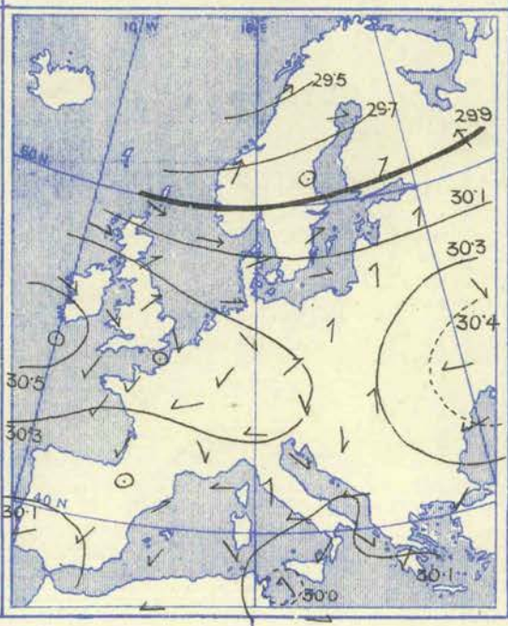
Barometer risen generally. Readings at 8 a.m. ranging from above 30·4 ins. in an anticyclone stretching from the Baltic to the Black Sea, and from above 30·3 ins. in other systems lying respectively over central France and the south-western portions of the United Kingdom, to below 30·2 ins. in a secondary depression between our south-east coast and Holland; below 30·0 ins. (1) in a shallow disturbance over the Mediterranean, and (2) over the north-east of Russia, and to below 29·8 ins. off the north-west of Norway. Not much modification in the general distribution of pressure during day, but secondary depression dispersing and barometer rising over the greater part of our area.

Wednesday, 4th November, 1903.

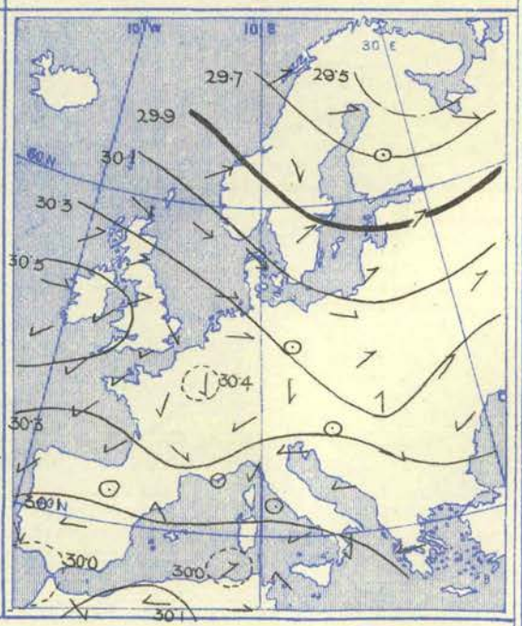
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine in nearly all parts of the United Kingdom, but foggy in central and south-eastern England. Cloudy or dull in most other regions, with rain at Christiansund and Brussels, and fog over Germany, Austria-Hungary, and Denmark. Fair at many Italian stations. Very little rain later over our area as a whole, but more than half-an-inch at Tunis, Lisbon, and Christiansund, and more than an inch in the Azores.

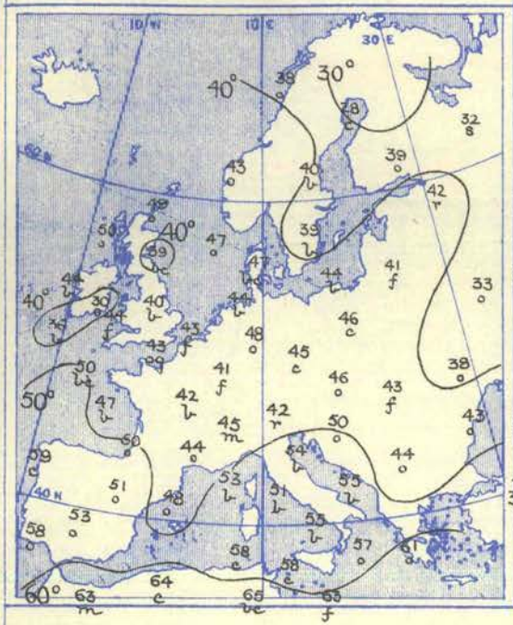
Temperature fallen over England and Russia, changed irregularly elsewhere. Readings at 8 a.m. highest, 65° at Algiers, 64° at Malta, 63° at Patras, and 62° at Palma. Lowest, (1) 26° at Moscow and Archangel, and 32° at Haparanda, (2) 32° to 34° over central England and 37° at Parsonstown, (3) 41° at Perpignan and 49° at Madrid. Rising subsequently to nearly 70° in the extreme south and to above it at Athens and in parts of Algeria. Maxima, below 50° in a few French and German localities, and below 55° in almost all parts of our Islands.

Wind in morning moderate to strong from the Westward or South-Westward in northern Europe, and circulating cyclonically round Sicily. Light anticyclonic airs prevailing in all other regions. Veering to North-West later at many northern stations and moderating somewhat in force, but no decided change taking place elsewhere.

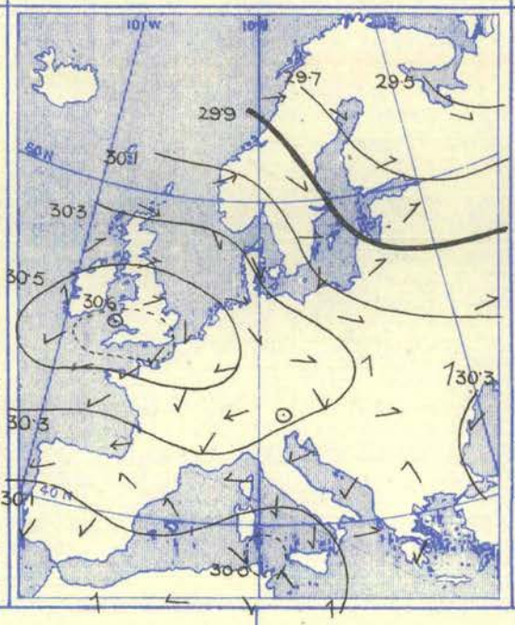
Barometer at 8 a.m. ranging from 30·5 ins. and upwards in an anticyclone centred over Ireland and above 30·4 ins. in a similar system having its centre over the south of Russia to below 30·0 ins. in a shallow depression in the neighbourhood of Sicily, and to 29·5 ins. and less in a larger disturbance off the north-west of Norway. Both the Irish anticyclone and the Norwegian disturbance moving eastwards later, but Mediterranean depression apparently travelling north-westwards to Sardinia. Russian high pressure giving way somewhat.

Thursday, 5th November, 1903.

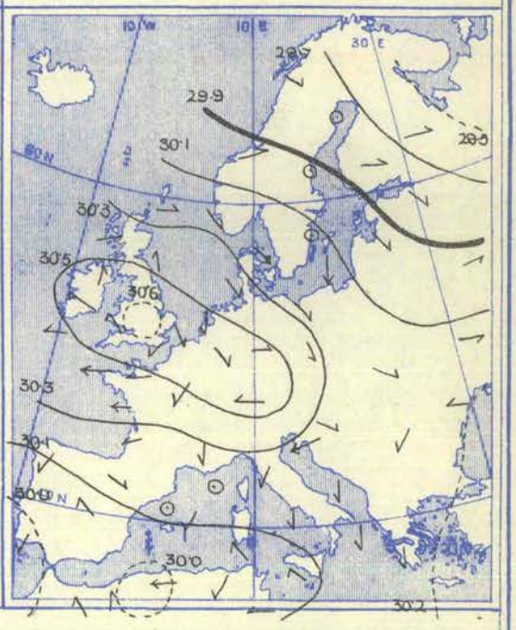
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning foggy at many of the English stations, but fine in most other parts of our Islands, as well as in Sweden, Denmark, Italy, and the south of France. Cloudy or dull elsewhere, with snow at Archangel. Fog over England dispersing later; rain falling in the west of Norway—heavily (1·1 ins.) at Christiansund. Heavy rain (1·4 ins.) reported also at Palma.

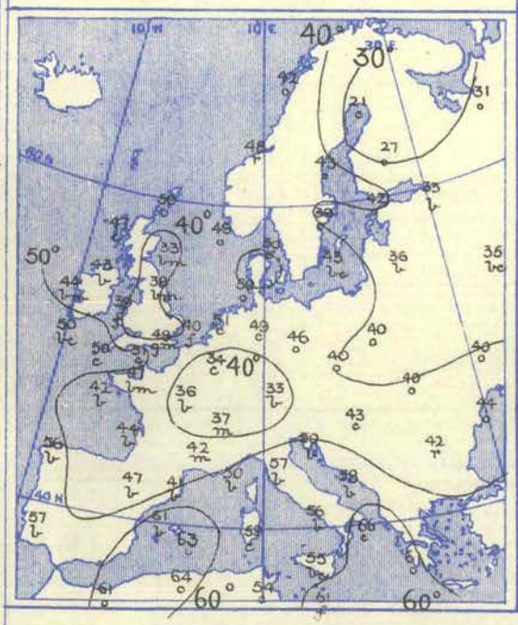
Temperature fallen in most places. Morning readings highest, 65° at La Calle, 64° at Algiers, and 63° at Barcelona, Palermo, Nemours, and Tunis; above 55° at most of the Mediterranean and Spanish coast stations. Lowest, (1) 28° at Parsonstown, 32° at Nottingham, and 36° at Oxford and Valencia (Ireland), (2) 28° at Haparanda, 32° at Archangel, and 33° at Moscow; below 40° over the central parts of England and Ireland generally. Rising during day to 50° and upwards in most parts of the United Kingdom, and to 56° at Valencia. Frost occurring over the central parts of Great Britain at night.

Wind light to moderate from the Eastward or North-Eastward over France, Spain, and the southern parts of the United Kingdom, but South-Westerly on our northern coasts. Strong from the Westward in the west of Norway; light to moderate from the North-Westward over Sweden, Denmark, Germany, and the Baltic; Westerly or South-Westerly in Russia; variable in Italy and Austria. No important change occurring during day.

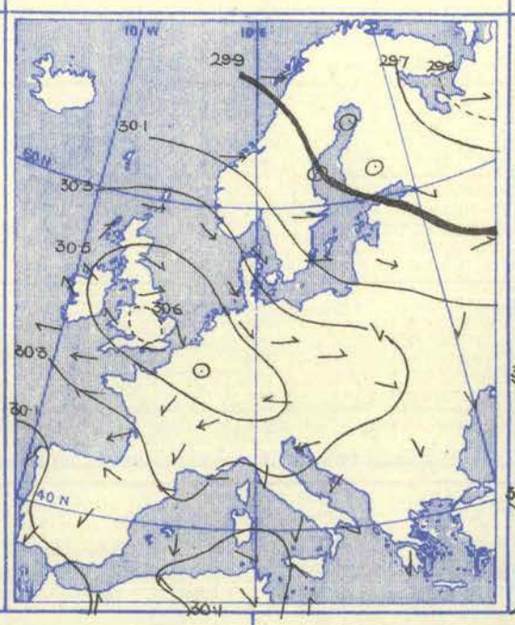
Barometer highest, 30·6 ins. and upwards over the northern and central parts of England and Ireland; 30·3 ins. and upwards in an anticyclone covering western and central Europe generally. Lowest, 29·6 ins. and less in a shallow low pressure system over northern Russia. No decided change occurring later.

Friday, 6th November, 1903.

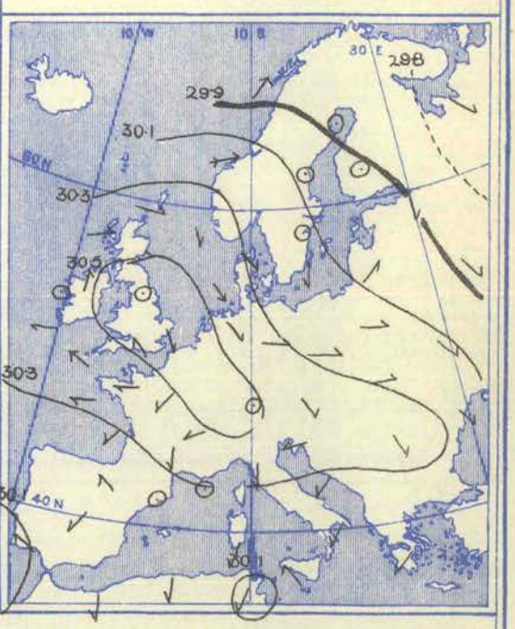
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over western Europe generally, but foggy over the greater part of England. Dull in most of the northern and eastern countries, with rain at Christiansund, Swinemünde, and Hermannstadt. Weather clearing temporarily over England later, but fog coming on again at night. Heavy rain falling in the west of Norway, and smaller quantities at some of the Mediterranean stations, with a thunderstorm at Algiers.

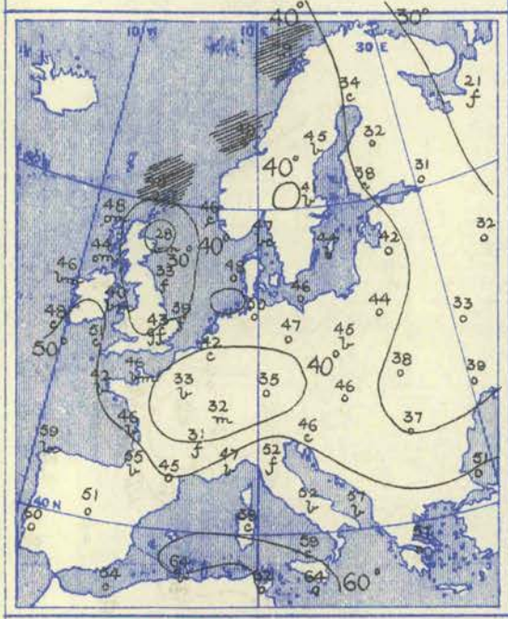
Temperature risen in the west and south of our Islands, and also in Scandinavia and Denmark, fallen elsewhere. Morning readings highest, 66° at Brindisi, 64° at Algiers, and 63° at Palma; slightly above 60° at several of the Mediterranean stations, and above 50° on some parts of our own southern coasts. Lowest, (1) 21° at Haparanda, 25° at Uleaborg and 27° at Kuopio; (2) 30° at Nottingham and 33° at Aberdeen; (3) 33° at Munich and 34° at Brussels. Remaining below 45° all day in some parts of central England, but exceeding 50° in nearly all other parts of the United Kingdom. Sharp frost occurring over the northern and central parts of Great Britain at night.

Wind light to fresh from the Eastward and South-Eastward in the west and south of our Islands, and also in France and Spain; light from the Westward on our north and east coasts; moderate to strong from the North-Westward on the eastern shores of the North Sea; calm in Sweden, light from the Westward in Russia, light North-Westerly in Austria, and Northerly in Italy; Southerly or South-Easterly in Sicily and Algeria. No important change occurring during day.

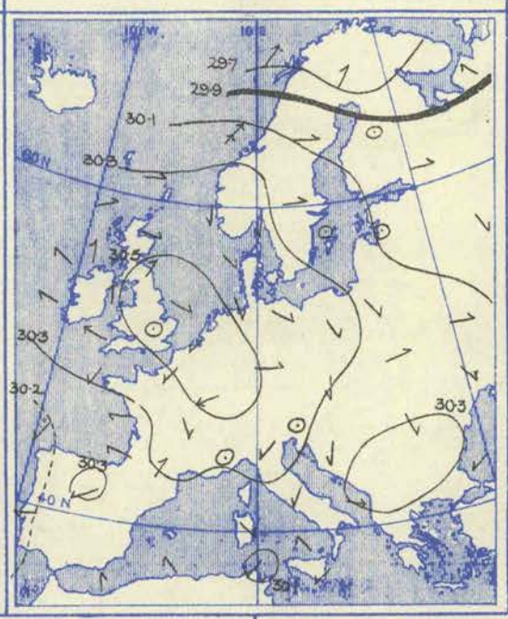
Barometer, highest, 30·6 ins. and upwards over central England, 30·3 ins. and upwards in an anticyclone covering the whole of western and central Europe. Lowest, 29·6 ins. and less in a shallow depression over northern Russia. Both systems moving eastwards later, and anticyclone decreasing gradually in intensity. Barometer falling slightly over our Islands generally.

Saturday, 7th November, 1903.

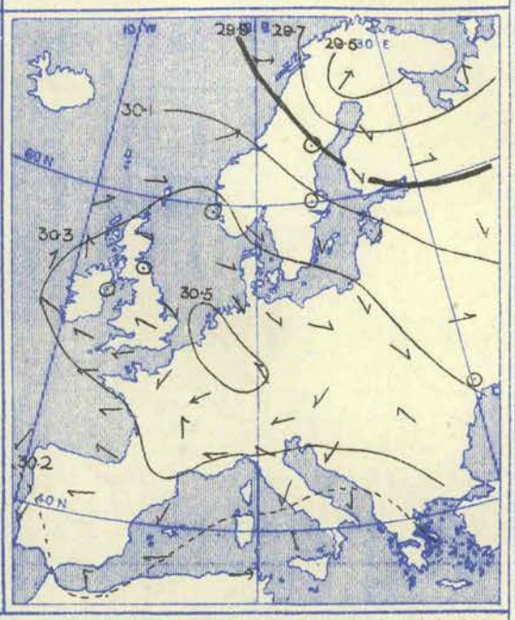
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over western, northern, and southern Europe generally, but foggy over the eastern and central parts of England, and dull in the Shetlands, the Hebrides, and the west of Norway, with rain at Bodö. Dull in the eastern and central countries, with rain at Cracow. No important change occurring during day.

Temperature risen in the west of our Islands, as well as in many parts of Germany and Austria, but fallen elsewhere. Morning readings highest, 64° at Algiers and Malta, 63° at Sfax, and 62° at Tunis; above 55° at most of the Mediterranean and Spanish coast stations. Lowest (1) 21° at Archangel, 30° at Uleaborg, and 31° at St. Petersburg; (2) 28° at Aberdeen and 30° at Nottingham; (3) 31° at Lyons and 32° at Belfort. Rising during the day to 50° or slightly above it at many of our own western and southern stations, to 60° and upwards in the west of France and most parts of southern Europe, and to 70° at Croisette. Frost occurring over the northern and central parts of Great Britain at night.

Wind, Easterly or North-Easterly over France, Spain, and the south of England, and fresh in force at some of the Channel stations; South-Easterly on our western coasts, light from the Westward on our north and east coasts. Strong to a gale from the South-Westward in the west of Norway; light from the North-Westward in Denmark, Germany, Austria, and the south of Russia; Northerly or North-Easterly in Italy and Greece. No important change occurring later.

Barometer, highest, 30·5 ins. and upwards over England, the Netherlands, western Germany, and the north-east of France; 30·3 ins. and upwards in an anticyclone covering the whole of western and central Europe. Lowest, 29·7 ins. and less in the extreme north of Scandinavia. High and low pressure systems both moving slowly eastwards during day; cyclonic disturbance beginning to approach our extreme north-west coasts at night.

IV.—GENERAL NOTES, etc.

At the commencement of the week the distribution of barometrical pressure was rather complex. The eastern and central parts of Europe were under the influence of a large anticyclone, but in the extreme northern and southern regions the weather was affected by well marked depressions, one of which travelled eastwards across the northern parts of Scandinavia and Russia, while the other moved slowly south-eastwards over the western and central parts of the Mediterranean. In our Islands the conditions were influenced at the same time by a large "V shaped" disturbance which advanced over us from the westward. Over the western and extreme northern and southern parts of Europe generally the weather was therefore in a very unsettled state, with rain in most places, the temperature being as a rule above the average for the time of year.

After Monday the "V-shaped" depression over the United Kingdom passed away to the northward, and in its rear an anticyclone came in from the Atlantic, the latter system increasing steadily in size and intensity and ultimately joining the high pressure area previously existing over eastern and central Europe. Fair, dry weather now set in over the United Kingdom, with light to moderate breezes from the South-Westward in the north, but with North-Easterly breezes in the south. The nights were, however, cold and foggy, and although the fog usually cleared in the daytime, there were many places, especially in the northern and eastern parts of England, in which it hung about all day.

Towards the close of the week the anticyclone began to move away in a south-easterly direction, and on Saturday a depression approached our extreme north-west coasts from the Atlantic, and caused freshening South-Westerly winds in the north of Ireland and the west of Scotland.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 260.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	16·9	+ 5·1	29	+ 9
STRATHPEFFER SPA	13·7	+ 0·3	23	+ 1
EDINBURGH	11·0	− 2·3	18	− 4
COCKLE PARK	34·6	—	56	—
NEWCASTLE-ON-TYNE	19·3	—	31	—
YORK	15·8	+ 3·3	25	+ 5
CROMER	31·2	—	49	—
LOWESTOFT	23·3	—	36	—
DUNMOW	17·6	—	27	—
SHEFFIELD	24·1	—	38	—
WORKSOP	20·3	+ 6·6	32	+ 10
THURCASTON	18·1	+ 3·3	28	+ 5
TUNBRIDGE WELLS	29·4	—	45	—
MARGATE	19·8	+ 2·2	31	+ 3
BROADSTAIRS	21·7	—	33	—
RAMSGATE	—	—	—	—
EASTBOURNE	33·3	+ 14·2	51	+ 22
BRIGHTON	36·0	+ 16·3	55	+ 25
WORTHING	30·8	—	47	—
BOGNOR	29·8†	—	46†	—
WATERGATE PARK	26·6	—	41	—
WESTBOURNE	24·3†	+ 5·8	37†	+ 9
VENTNOR HOSPITAL	27·4	+ 8·0	42	+ 12
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	22·6	+ 7·2	35	+ 11
SOUTHPORT	23·5	—	37	—
RHYL	31·1	—	49	—
ABERDOVEY	41·2†	—	64†	—
TENBY	—	—	—	—
TORQUAY	32·8	+ 14·8	50	+ 22
NEWQUAY	38·2	+ 17·9	58	+ 27
GUERNSEY	29·5†	+ 10·9	45†	+ 17

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Vol. xx, No. 35, p. 206 ..	Hastings	—	—	—	—	—	—	—	—	—	—	—	52·6	+ 19·8	66	+ 11
„ „ „ 37, p. 218 ..	Southampton	—	—	—	—	—	—	—	—	—	0·29	− 0·35	—	—	—	—
„ „ „ 38, p. 224 ..	Stornoway	—	—	—	—	—	—	—	—	3	0·15	− 0·37	—	—	—	—
„ „ „ „ „ „ ..	Durham	—	—	61·0	—	56·7	+ 4·4	103	—	—	—	—	—	—	—	—
„ „ „ „ „ „ ..	Shaftesbury	—	51	—	53·4	59·4	+ 5·3	122	—	—	—	—	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 45.] *Third Series.* WEEK ENDING SATURDAY, NOVEMBER 14TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 266.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	56	30	50·7	40·3	45·5	3 above	32	+13	5	−10	1881	− 70	514	−104
	1. SCOTLAND, EAST -	57	27	50·3	37·4	44·1	3 above	34	+14	13	− 6	2127*	−173	550	−129
	2. ENGLAND, N.E. -	57	26	51·6	39·9	45·8	2 above	35	+10	6	− 6	2520	+ 5	356	−177
	3. ENGLAND, EAST -	59	31	52·6	42·7	47·6	4 above	39	+10	0	−13	3033	+118	331	−253
	4. MIDLAND COUNTIES	56	27	52·1	42·0	47·1	4 above	36	+ 8	0	−16	2781	− 82	377	−233
	5. ENGLAND, SOUTH -	57	28	53·6	44·1	48·9	4 above	48	+10	0	− 8	3224	+ 16	208	−216
Principal Grazing Districts.	6. SCOTLAND, WEST -	55	28	51·8	41·2	46·5	3 above	35	+ 9	2	− 9	2432	− 26	334	−132
	7. ENGLAND, N.W. -	59	30	52·7	43·4	48·1	3 above	43	+13	0	− 8	2717	+ 18	271	−154
	8. ENGLAND, S.W. - -	58	34	53·8	46·2	50·0	4 above	56	+16	0	− 6	3118	+114	162	−163
	9. IRELAND, NORTH -	56	36	52·0	42·9	47·5	3 above	39	+11	0	−10	2507	− 88	301	− 94
	10. IRELAND, SOUTH -	60	37	53·6	45·2	49·4	3 above	52	+15	0	− 8	2988	+ 34	199	− 87
	— CHANNEL ISLANDS -	58	43	55·0	49·0	52·0	2 above	70	+12	0	− 1	3648	+127	49	− 71

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 266.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	6	15	3 more	227	+34	58·9	+17·6	9	0	16	0	1001	− 79	25	− 2
	1. SCOTLAND, EAST -	5	6	2 less	201	+34	35·6	+ 8·9	13	0	22	0	1133	−105	28	− 3
	2. ENGLAND, N.E. -	5	3	3 less	171	+17	28·0	+ 6·3	9	− 2	15	− 4	1226	− 88	30	− 2
	3. ENGLAND, EAST -	5	3	3 less	153	− 1	27·1	+ 6·2	3	−12	4	−20	1393	−115	35	− 3
	4. MIDLAND COUNTIES	5	3	3 less	168	+19	32·1	+ 8·3	7	− 7	11	−11	1214	− 89	30	− 2
	5. ENGLAND, SOUTH -	5	3	4 less	171	+27	32·2	+ 8·2	5	− 9	8	−14	1473	− 45	37	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST -	7	18	5 more	211	+38	59·1	+17·3	5	− 7	9	−11	1238	− 51	31	− 1
	7. ENGLAND, N.W. -	7	10	2 more	198	+34	39·7	+10·1	9	− 3	15	− 4	1331	+ 56	33	+ 1
	8. ENGLAND, S.W. - -	5	4	6 less	190	+25	42·7	+ 9·9	9	− 7	15	−11	1445	−106	36	− 3
	9. IRELAND, NORTH -	6	9	1 more	228	+32	41·9	+11·1	8	− 6	13	−10	1132	− 67	28	− 2
	10. IRELAND, SOUTH -	6	11	1 more	208	+32	42·9	+ 8·9	7	−10	11	−16	1262	−107	31	− 3
	— CHANNEL ISLANDS -	5	5	4 less	202	+33	32·5	+ 5·3	14	− 4	22	− 6	1686	−105	42	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was very dull over the country as a whole, with frequent, though generally slight, falls of rain.

Temperature was above the mean, the excess ranging from 2° in England N.E. and the Channel Islands, to 4° over the eastern, southern, and central parts of England. The highest of the maxima were recorded on irregular dates, and ranged from 60° in Ireland S. and 59° in England E. and N.W. to 56° in Ireland N., the Midland Counties, and Scotland N., and to 55° in Scotland W. The lowest of the minima were registered on Sunday over Great Britain, and on Saturday at most of the Irish stations. They ranged from 26° in England N.E. and 27° in Scotland E. and the Midland Counties, to 37° in Ireland S. and to 43° in the Channel Islands. On most nights, even in the north, the minima were several degrees above the freezing point.

Rainfall was less than the mean over the Kingdom generally, but rather more in Scotland N., Scotland W., and also in the Irish districts.

Bright Sunshine was much below the normal amount in nearly all districts. The percentage of the possible duration ranged from 22 in Scotland E. and the Channel Islands, to 9 in Scotland W., 8 in England S., and to no more than 4 in England E.

Barometer and Wind. Barometric pressure was very unstable during the whole period. Numerous depressions appeared from the Atlantic and moved north-eastwards or eastwards over or in the immediate vicinity of the United Kingdom. As a rule, their centres remained beyond our western and northern coasts, so that the direction of the wind was mainly Southerly or South-Westerly to Westerly; in force the wind was usually moderate, but occasionally increased to a fresh or strong breeze, and to gale force in the west and north-west on Friday.

2027*r*. Wy. & S. Ltd
370 11 | 03

II.—DATA from which the SUMMARY on page 265 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	51	38	48·6	42·1	45·4	+ 2·8	24	0	7	0·52	− 0·44	*	*	*	*
	Stornoway	53	36	50·4	41·6	46·0	+ 3·4	30	1	7	2·09	+ 0·78	10·2	− 0·3	18	− 1
	Wick	53	30	49·7	37·0	43·4	+ 1·0	31	14	6	1·10	+ 0·44	*	*	*	*
	Lairg Ş	54	33	50·9	37·2	44·1	+ 4·2	35	13	5	1·09	+ 0·27	*	*	*	*
	Glencarron Ş	55	36	50·8	40·0	45·4	+ 4·0	32	6	7	2·26	+ 0·06	*	*	*	*
	Fort Augustus Ş	56	36	52·0	39·5	45·8	+ 3·6	37	7	6	1·30	+ 0·29	2·8	− 2·7	5	− 5
	Fort William	56	41	52·4	44·5	48·5	+ 5·0	46	0	7	2·20	+ 0·40	3·8	− 3·7	7	− 7
1. SCOTLAND, E.	Nairn	56	33	51·7	37·9	44·8	+ 3·2	37	11	5	0·84	+ 0·33	*	*	*	*
	Aberdeen	54	27	50·4	35·7	43·1	+ 0·5	34	18	6	0·37	− 0·33	20·9	+ 7·4	37	+ 13
	Braemar Ş	51	27	48·2	34·6	41·4	+ 2·5	17	30	5	0·66	− 0·20	*	*	*	*
	Ochtertyre Ş	57	33	51·3	36·9	44·1	+ 2·4	36	14	6	0·96	− 0·04	*	*	*	*
	Leith	56	33	53·4	41·0	47·2	+ 3·5	41	3	5	0·19	− 0·28	*	*	*	*
	Marchmont Ş	54	34	50·0	38·0	44·0	+ 2·6	31	11	5	0·35	− 0·42	9·5	− 3·3	16	− 6
2. ENGLAND, N.E.	Alnwick Castle	56	28	52·2	36·3	44·3	+ 1·2	40	16	6	0·34	− 0·41	*	*	*	*
	Durham	55	26	49·7	38·4	44·1	+ 1·7	30	10	5	0·28	− 0·33	12·1	− 0·9	21	− 2
	Shields	57	30	53·0	40·1	46·6	+ 2·7	40	5	3	0·05	− 0·49	*	*	*	*
	Scarborough Ṁ	54	35	51·6	40·2	45·9	+ 1·5	35	5	7	0·58	− 0·08	7·1	—	12	—
	Spurn Head	53	37	51·1	42·9	47·0	+ 2·2	35	0	5	0·20	− 0·30	*	*	*	*
	Fulbeck (Lincolnshire)	53	? 26	52·0	? 41·6	? 46·8	+ 4·3	35	1	6	0·20	− 0·27	5·8	—	10	—
3. ENGLAND, E.	Hillington Ṁ	53	31	51·1	41·7	46·4	+ 3·0	32	1	6	0·40	− 0·20	1·8	− 12·0	3	− 20
	Yarmouth	53	33	51·3	42·6	47·0	+ 2·5	35	0	4	0·47	− 0·18	*	*	*	*
	Geldeston	54	36	51·7	42·2	47·0	+ 2·6	35	0	4	0·38	− 0·20	1·2	− 14·5	2	− 23
	Cambridge	55	34	54·1	40·5	47·3	+ 3·7	43	4	5	0·22	− 0·23	2·3	− 13·1	4	− 21
	Felixstowe	59	40	53·5	44·3	48·9	+ 4·6	48	0	4	0·39	—	2·8†	—	5†	—
	Rothamsted	55	33	52·7	42·0	47·4	+ 4·1	38	0	6	0·22	− 0·41	6·0	− 9·4	10	− 15
	Shoeburyness	56	41	53·6	45·3	49·5	+ 4·8	53	0	4	0·19	− 0·30	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	54	30	51·8	42·6	47·2	+ 4·7	36	0	6	0·54	− 0·12	9·2	—	15	—
	Bawtry (Hesley Hall)	55	29	53·6	42·4	48·0	+ 5·0	42	0	4	0·22	− 0·24	*	*	*	*
	Nottingham	54	28	52·6	41·7	47·2	+ 3·7	38	1	6	0·25	− 0·24	5·8	—	10	—
	Loughborough	54	27	52·6	42·6	47·6	+ 4·1	39	0	5	0·29	− 0·21	*	*	*	*
	Colly Weston (Stamford)	53	30	52·3	41·0	46·7	+ 3·2	37	3	7	0·14	− 0·42	*	*	*	*
	Cheadle Ṁ	53	36	50·0	41·2	45·6	+ 3·3	29	2	7	0·43	− 0·25	*	*	*	*
	Birmingham (Edgbaston)	54	38	50·8	42·6	46·7	+ 3·2	33	0	4	0·25	− 0·31	5·5	—	9	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ṁ	56	31	52·4	42·3	47·4	+ 3·1	38	0	5	0·26	− 0·31	*	*	*	*
	Cirencester	53	33	51·9	40·6	46·3	+ 3·5	36	4	5	0·34	− 0·34	7·5	− 6·8	12	− 11
	Oxford	54	32	53·1	43·4	48·3	+ 4·6	44	0	3	0·15	− 0·38	7·2	− 7·4	12	− 12
5. ENGLAND, S.	London	56	37	53·9	42·6	48·3	+ 3·4	44	0	5	0·23	− 0·31	4·4‡	− 5·1‡	7‡	− 8‡
	Swarraton (Alresford) Ṁ	54	28	52·6	39·4	46·0	+ 2·6	39	7	4	0·25	− 0·48	*	*	*	*
	Dungeness	56	42	54·7	45·7	50·2	+ 3·9	57	0	5	0·24	− 0·36	2·2	—	3	—
	Hastings (St. Leonards)	55	39	53·0	44·3	48·7	+ 2·5	47	0	5	0·43	− 0·32	2·9	− 14·6	5	− 23
	Southampton	57	39	55·2	44·0	49·6	+ 3·7	53	0	4	0·23	− 0·50	5·9	− 9·6	9	− 15
	Portland Bill	56	47	54·3	48·7	51·5	+ 4·0	67	0	4	0·12	—	*	*	*	*
	Shaftesbury Ṁ	53	40	51·3	44·0	47·7	+ 4·4	40	0	6	0·24	− 0·56	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	55	37	52·8	42·0	47·4	+ 3·4	38	0	7	3·32	+ 1·44	*	*	*	*
	Glasgow	53	40	51·0	42·7	46·9	+ 4·2	34	0	7	0·86	− 0·01	3·9	− 3·4	7	− 6
	Cally Ş	53	33	51·1	39·4	45·3	+ 2·2	34	7	7	1·40	+ 0·19	*	*	*	*
	Aspatria	53	28	51·7	40·0	45·9	+ 3·1	36	6	7	1·53	—	6·2	—	11	—
	Douglas (Isle of Man)	54	36	52·6	41·7	47·2	+ 1·9	38	1	6	1·72	+ 0·66	5·7	− 9·5	10	− 16
7. ENGLAND, N.W.	Newton Rigg	53	32	50·6	38·7	44·7	+ 3·9	33	9	7	1·02	—	8·0	—	14	—
	Stonyhurst	53	37	50·1	43·4	46·8	+ 3·4	34	0	7	1·40	+ 0·35	9·4	− 1·8	15	− 3
	Blackpool Ṁ	55	36	53·0	43·4	48·2	+ 3·8	43	0	7	1·03	+ 0·21	9·3	− 2·0	15	− 3
	Manchester (Prestwich)	53	35	51·0	43·1	47·1	+ 3·6	36	0	7	1·00	+ 0·20	6·4	—	10	—
	Liverpool Obsy. (Bidston)	55	36	52·9	43·3	48·1	+ 3·4	43	0	7	0·61	− 0·05	12·6	—	21	—
	Chester (Hawarden Bridge)	57	39	54·8	45·3	50·1	+ 4·9	57	0	4	0·36	—	*	*	*	*
	Llandudno Ṁ	59	37	55·1	44·1	49·6	+ 3·1	53	0	7	0·98	+ 0·21	9·1	− 3·9	15	− 6
	Holyhead	54	39	53·0	45·9	49·5	+ 2·2	53	0	6	1·31	+ 0·39	*	*	*	*
	Bettws-y-Coed	55	30	53·6	43·4	48·5	+ 2·2	46	0	7	1·44	—	5·1	—	8	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	56	47	54·4	48·7	51·6	+ 3·6	67	0	5	0·35	− 0·55	7·7	− 7·6	12	− 12
	Clifton	54	34	53·3	45·0	49·2	+ 4·6	50	0	4	0·43	− 0·34	*	*	*	*
	Bath	56	34	54·3	44·1	49·2	+ 3·8	50	0	5	0·17	− 0·52	9·2	—	15	—
	Arlington (N. Devon)	54	42	51·6	44·6	48·1	+ 3·4	43	0	7	1·06	− 0·28	*	*	*	*
	Cullompton Ṁ	55	39	53·9	44·9	49·4	+ 4·9	52	0	4	0·33	− 0·51	13·0	− 0·5	21	− 1
	Falmouth	55	42	54·1	48·0	51·1	+ 2·8	64	0	3	0·28	− 0·94	9·1	− 8·6	14	− 14
	Plymouth	58	45	54·7	47·8	51·3	+ 4·0	65	0	4	0·15	− 0·69	11·1	− 4·6	18	− 7
9. IRELAND, N.	Malin Head	53	? 40	51·1	44·6	47·9	+ 2·5	41	0	7	0·54	− 0·19	*	*	*	*
	Edenfel (Omagh)	54	37	50·9	40·7	45·8	+ 3·5	32	4	7	0·72	− 0·12	*	*	*	*
	Blacksod Point	56	42	52·6	46·9	49·8	+ 3·5	55	0	7	2·13	+ 0·91	*	*	*	*
	Markree Castle	56	36	52·5	41·2	46·9	+ 3·1	38	2	6	0·94	+ 0·02	9·1	− 4·6	15	− 8
	Armagh	55	36	52·1	42·2	47·2	+ 3·8	36	0	5	0·69	+ 0·03	6·7	− 7·7	11	− 13
	Donaghadee	55	38	52·7	41·9	47·3	+ 2·4	38	0	6	0·45	− 0·28	*	*	*	*
10. IRELAND, S.	Dublin	60	39	55·5	44·7	50·1	+ 4·1	57	0	5	0·62	+ 0·04	11·2	− 6·4	18	− 11
	Birr Castle	56	37	52·6	42·7	47·7	+ 3·7	40	0	7	1·16	+ 0·48	5·2	− 10·6	9	− 17
	Kilkenny	58	40	53·1	43·7	48·4	+ 3·4	45	0	6	0·89	+ 0·22	*	*	*	*
	Waterford	60	40	? 54·0	45·7	49·9	+ 4·4	55	0	5	0·84	− 0·09	*	*	*	*
	Roche's Point	56	42	52·9	46·6	49·8	+ 2·3	55	0	5	0·56	− 0·50	*	*	*	*
	Valencia	56	42	53·3	47·9	50·6	+ 2·4	60	0	7	1·93	+ 0·63	3·7	− 12·9	6	− 21
	Killarney	57	40	54·3	45·9	50·1	+ 3·9	57	0	4	0·71	− 0·73	*	*	*	*
	Foynes	56	39	52·7	44·1	48·4	+ 2·9	45	0	6	2·00	+ 1·04	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	58	48	54·9	49·3	52·1	+ 1·7	71	0	4	0·19	− 0·64	10·5	− 8·3	17	− 13
	Jersey	58	43	55·0	48·6	51·8	+ 2·5	69	0	6	0·82	− 0·12	16·4	− 2·2	26	− 4

Stations Marked Ṁ are in connection with the Royal Meteorological Society, and those marked Ş with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

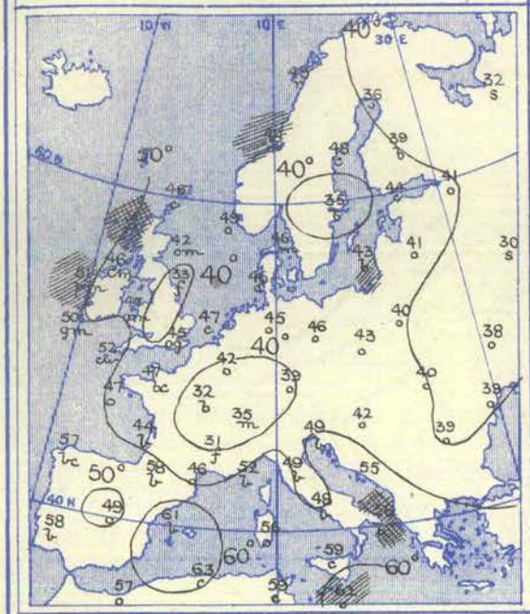
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 8th November, 1903.

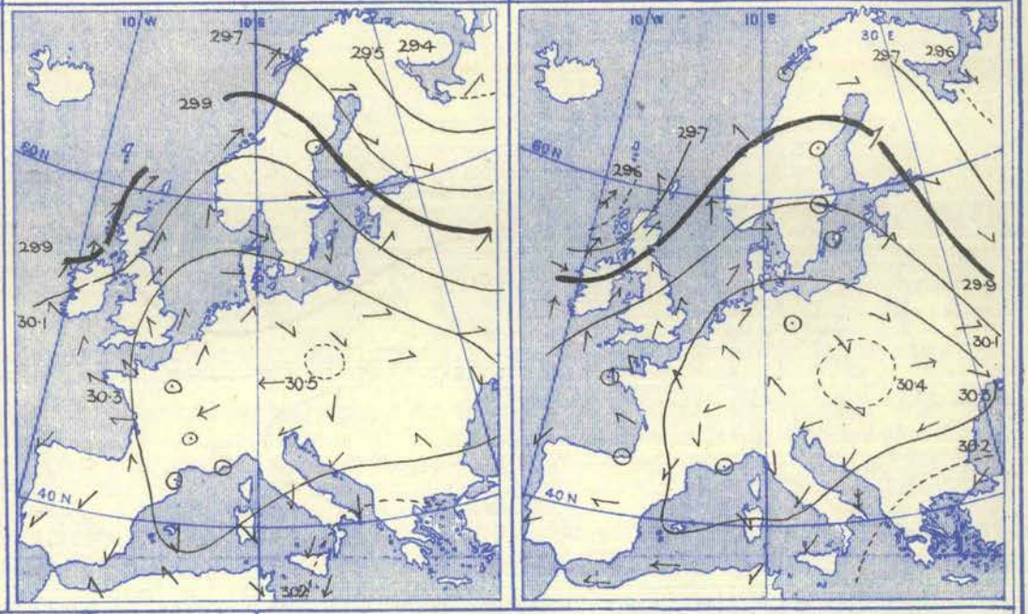
Temperature and Weather. 8 a.m.



Weather in morning fine and bright in Italy, Portugal, the west of France, and at several Scandinavian stations, cloudy or dull elsewhere, with rain at Bodö and Alicante, and showers at Blacksod Point. Rain falling later in almost all parts of the United Kingdom and continuing all day at Bodö. Amounts small generally, but 0·5 in. at Bodö as well as at Stornoway.

Temperature risen briskly over Great Britain. Readings at 8 a.m. highest, 63° at Algiers and between 60° and 50° in most other southern regions. Lowest, (1) 30° at Moscow and 32° at Archangel, (2) 33° at North Shields, (3) 31° at Lyons and 32° at Paris and Limoges, (4) 48° at Rome and 49° at Florence. Rising later to 73° at Oran, 72° at Biarritz, and to above 65° in the extreme south generally, but not exceeding 55° in any part of our Islands, and remaining below 50° over the major portion of central Europe.

Barometer and Wind. 8 a.m. and 6 p.m.

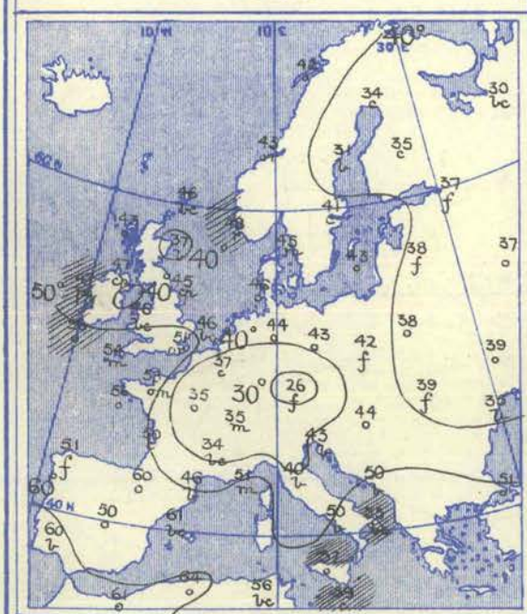


Wind in morning light and anticyclonic in all the central regions, but a partial cyclonic circulation of Northerly winds prevailing over and to the southward of Italy, and strong South-Westerly winds or moderate gales on our own north-west coasts and on the west coast of Norway; and moderate North-Westerly or Westerly breezes in the north or Europe. Both the South-Westerly winds in the north-west and the Northerly wind at Brindisi increasing to a fresh gale by evening, but not much change taking place as a whole.

Barometer at 8 a.m. ranging from 30·4 ins. and upwards in a large anticyclone over the central countries to about 30·1 ins. in Greece, to below 29·9 ins. (1) off our north-west coasts, and (2) over the White Sea. Anticyclone decreasing slowly in intensity during day, a large depression skirting the western and north-western coasts of the British Isles, and pressure falling briskly in that region. Disturbance in the neighbourhood of the White Sea moving away eastwards.

Monday, 9th November, 1903.

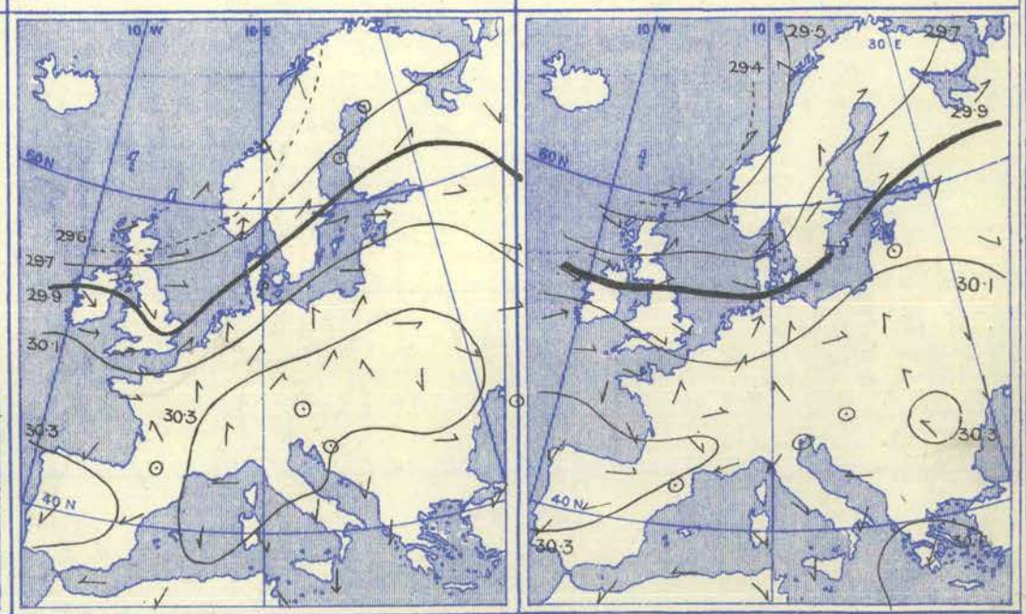
Temperature and Weather. 8 a.m.



Weather in morning cloudy or dull over our area as a whole, but still fine and bright in most parts of Italy and Portugal, showery in the north-west of Ireland, rainy in London and at Skudesnaes, and fog prevailing at Corunna and at some Russian and central European stations. Slight falls of rain experienced later in Germany and the most western and north-western countries. Fog dispersing.

Temperature risen over England and France, fallen in most other regions. Readings in morning highest, 64° at Algiers and San Fernando, and a little above or below 60° in many other southern localities. Lowest, (1) 30° at Archangel, 31° at Hernösand, (2) 32° at Nicolaieff, (3) 26° at Munich, 34° at Lyons, and 35° at Paris, (4) 40° at Florence, and 42° at Rome. Rising later to 72° at Cape Sicié, to 70° at Lisbon, Nemours, and Sfax, and to above 60° in the far south generally. Thermometer not exceeding or remaining below 50° over all the central and northern parts of the Continent, as well as in the north of our Islands.

Barometer and Wind. 8 a.m. and 6 p.m.

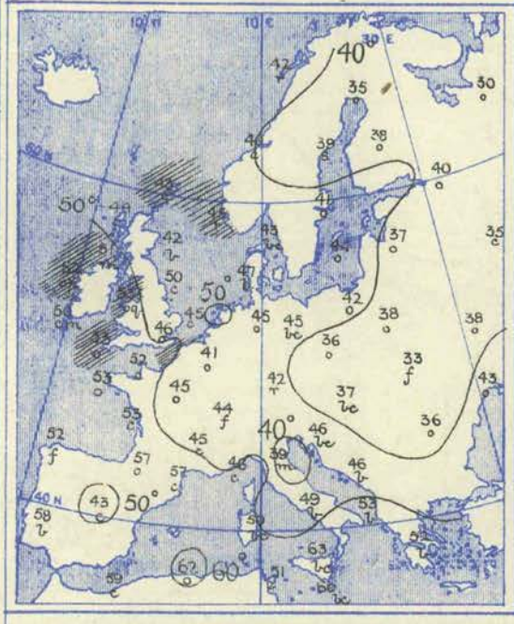


Wind at 8 a.m. light and anticyclonic over the southern half of our area, Westerly to Southerly elsewhere; fresh or strong on our own western coasts and strong to a gale in the south-west of Norway. Increasing to gale force later in day on the north coast of Ireland, but no important change either in direction or force over our area as a whole.

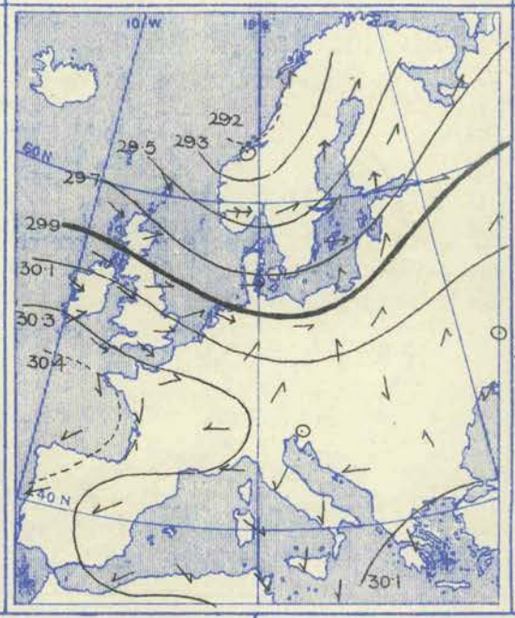
Barometer at 8 a.m. highest, 30·2 ins. to 30·3 ins. and above in a large anticyclone embracing all the southern and central countries; lowest, 29·5 ins. and less in a large depression off the west of Norway and relatively low in some secondaries passing eastwards over the United Kingdom. Latter systems reaching the North Sea by evening. No other important change in the relative distribution of pressure, but a general rise of the barometer setting in in the most western and south-western regions.

Tuesday, 10th November, 1903.

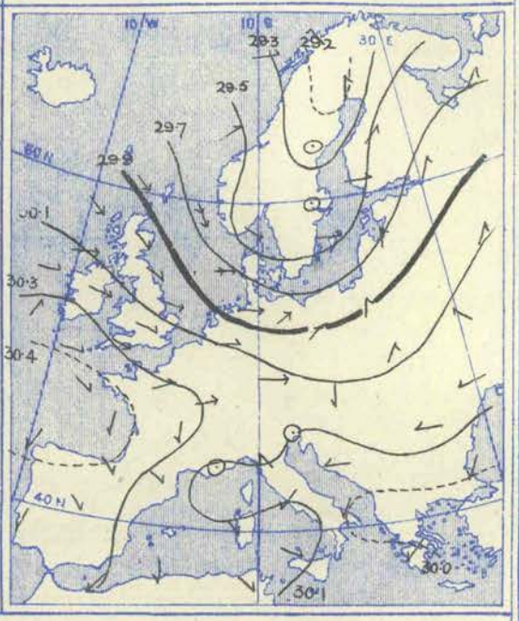
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or overcast generally with rain in several parts of the British Isles, at Skudesnaes, and Athens, and snow at Hernösand. Fog or rain prevalent at some stations in central Europe. Fine and bright in Portugal and on various shores of the Mediterranean. Slight amounts of rain falling later in many parts of the Netherlands, Scandinavia, and Finland, and heavier falls in Germany—as much as 0·95 in. at Memel.

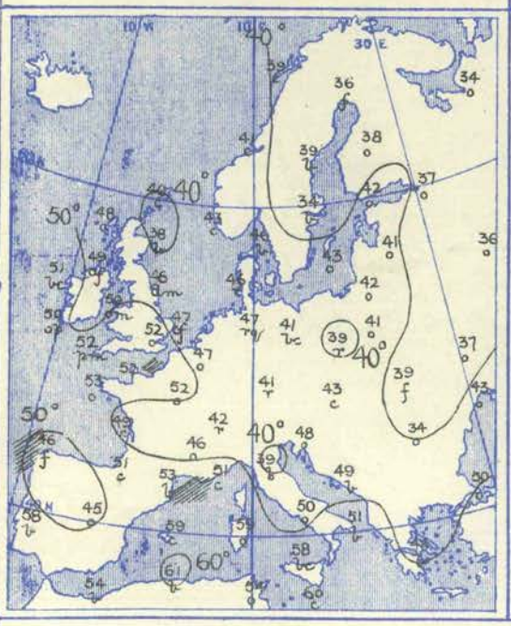
Temperature risen over the western countries, fallen or changed little elsewhere. Morning readings highest, 63° at Palermo, 62° at Algiers, 59° at Barcelona, 58° at Lisbon, and 53° on the west and south-west coast of England. Lowest, (1) 30° at Archangel, 35° at Moscow, (2) 31° at Cracow, 34° at Vienna, (3) 39° at Florence, 40° at Rome, (4) 43° at Madrid. Maxima during day below 55° in most parts of our Islands, and below 50° in the central and northern regions of the Continent, but above 60° in the southern countries, and as high as 73° at Lisbon.

Wind at 8 a.m. moderate to strong from the Westward over the United Kingdom and on the eastern shores of the North Sea, and from the Southward over the Baltic, Scandinavia, and Finland. Light and anticyclonic in the south-west of our area, and rather variable in the south-east and south. Westerly wind veering somewhat later and increasing to a strong gale both at Skudesnaes and Fanö. No important change elsewhere.

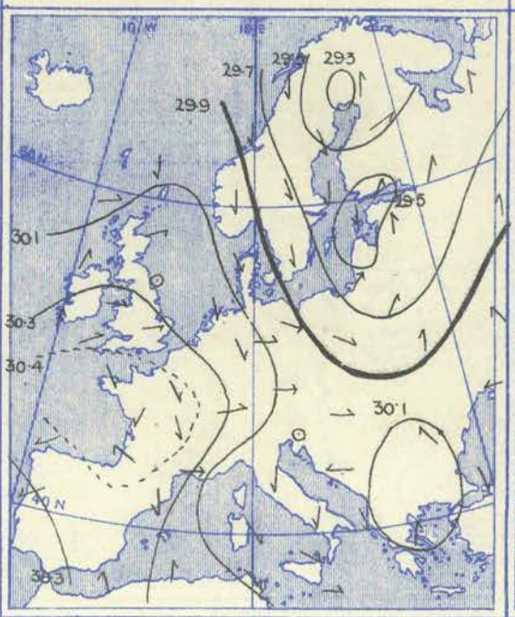
Barometer at 8 a.m. highest, above 30·3 ins. in an anticyclone stretching from the Atlantic to the west of France, and above 30·2 ins. in a long band extending thence to Little Russia. Lowest, about 29·5 ins. in a depression off the north-west of Norway. Latter system travelling eastwards during day, and anticyclone in south-west expanding north-eastwards and eastwards. Pressure giving way over the eastern half of Europe.

Wednesday, 11th November, 1903.

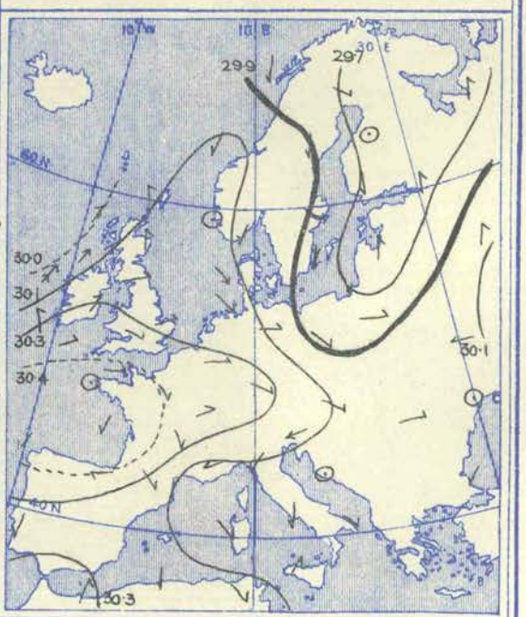
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in Algeria and in a few parts of southern Europe, but cloudy or overcast over our area as a whole. Rainy at some of our own stations, in central Europe, and foggy at Lemberg and Corunna. Rain occurring in most countries later; slight generally, but as much as 0·6 in. at Valencia Island and 1·0 in. at La Calle.

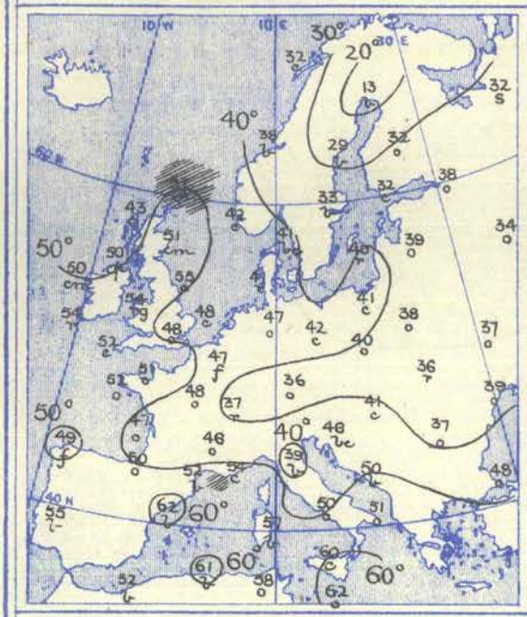
Temperature changed irregularly. Readings at 8 a.m. highest, 61° at Algiers, 59° at Cagliari and Barcelona, and 58° at Lisbon. Lowest, (1) 34° to 39° over Russia and Sweden, (2) 33° at Aberdeen, (3) 39° at Florence, (4) 40° at Limoges and Madrid. Rising later to 72° at Algiers, 70° at Lisbon, and to above 60° at most southern stations. Thermometer again remaining below 50° over the central and northern parts of Europe, and below 55° at most of our own stations.

Wind in morning showing two cyclonic circulations of moderate force over the northern half of the Continent. A light anticyclonic movement prevailing over the more south-western regions, and light variable airs over the Mediterranean and Italy. A fresh South-Westerly gale springing up at Blacksod Point by evening, and a fresh Northerly gale in Gothland. No decided change elsewhere.

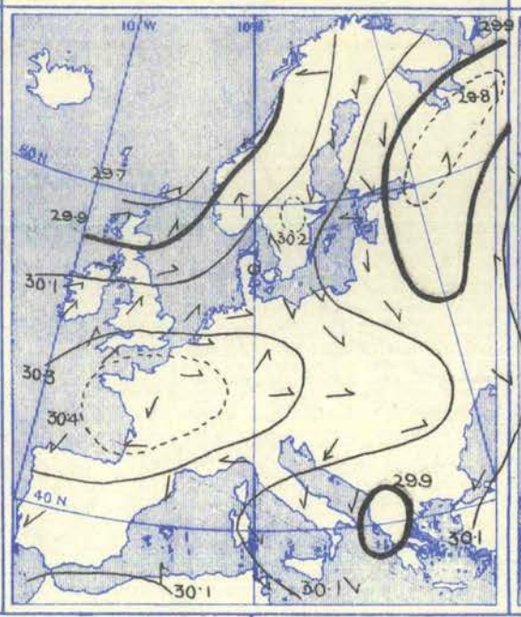
Barometer at 8 a.m. ranging from above 30·4 ins. in the central portion of an anticyclone over the Bay of Biscay and France, to below 29·5 ins. in a depression over the northern part of the Baltic, and to 29·3 ins. and less in another centre near Haparanda. Uniform and relatively low over Italy. Depressions travelling eastwards during day and decreasing in depth, but another disturbance appearing off the north-west coast of the British Isles, and barometer falling in most parts of the United Kingdom.

Thursday, 12th November, 1903.

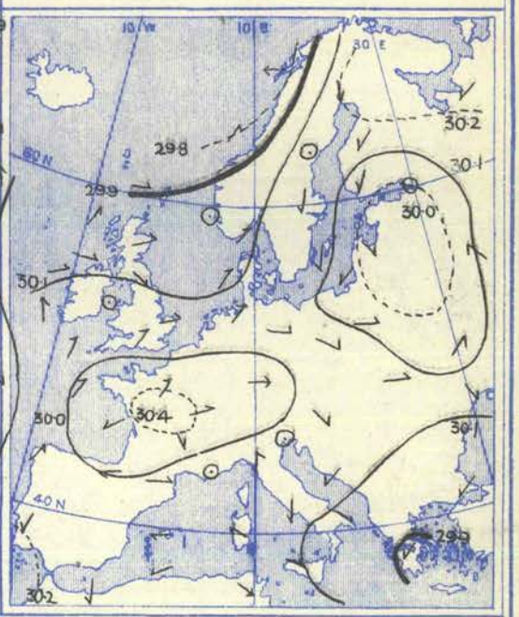
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. still cloudy or dull, except in some of the most southern regions. Rainy at Wisby, Fanö, some parts of central Europe, in Ireland, and Wales, and snow falling at Archangel. Fog prevailing at Corunna, Lorient, and Roche's Point, and also at Brussels. Snow later in many parts of Russia and Sweden, and rain in the northern and western countries generally, and also at Constantinople and in Greece.

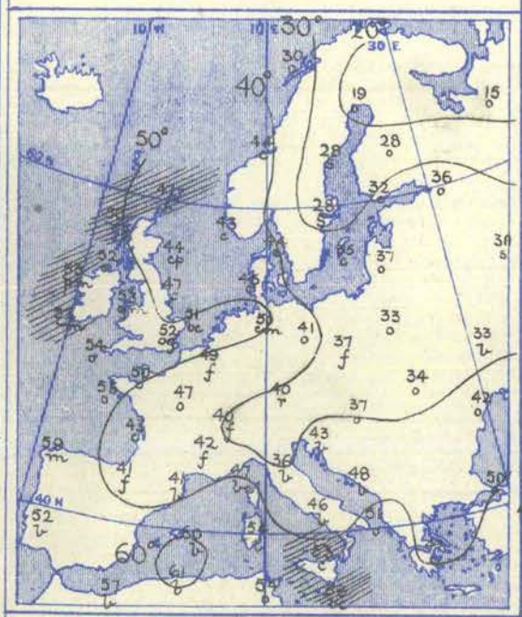
Temperature risen in Ireland and Scotland, fallen quickly in Scandinavia and its neighbourhood, Readings at 8 a.m. highest, about 60° at some stations on the shores of the Mediterranean and 55° at Donaghadee, Leith, and Shields. Lowest, (1) 13° at Haparanda, (2) 33° at Kharkov, (3) 36° at Munich and 39° at Florence. Rising during the day to 57° at North Shields to above 60° on most shores of the Mediterranean, to 70° at Corunna and San Fernando, and to 72° in Algeria. Maxima below 50° over central Europe, and only 52° at Brindisi.

Wind at 8 a.m. light and anticyclonic over France and the surrounding countries; cyclonic elsewhere, a complete circulation prevailing around the northwest of Russia. Very little change later in day.

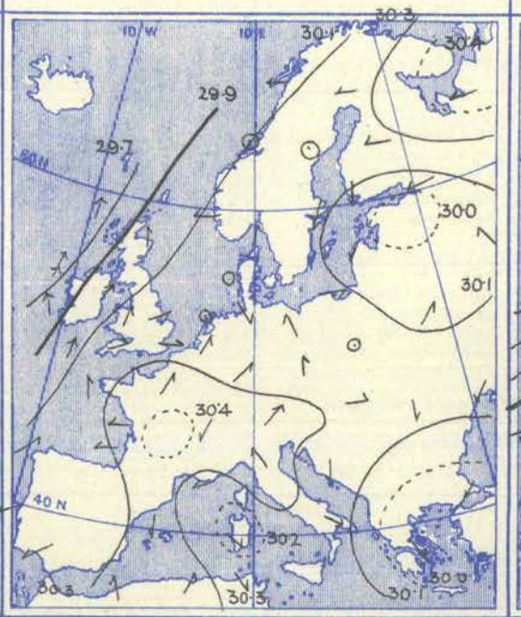
Barometer in morning ranging from 30·4 ins. and upwards in an anticyclone having its central portion over France, to below 30·0 ins. in a depression lying between Greece and Italy, below 29·8 ins. in an elongated disturbance stretching from the Gulf of Finland to Archangel, and to below 29·7 ins. in a system lying to the northward of Scotland. Two first mentioned depressions moving south-eastwards later, and that off Scotland travelling away north-north-eastwards or northwards. A fresh fall of the barometer commencing in the west of Ireland.

Friday, 13th November, 1903.

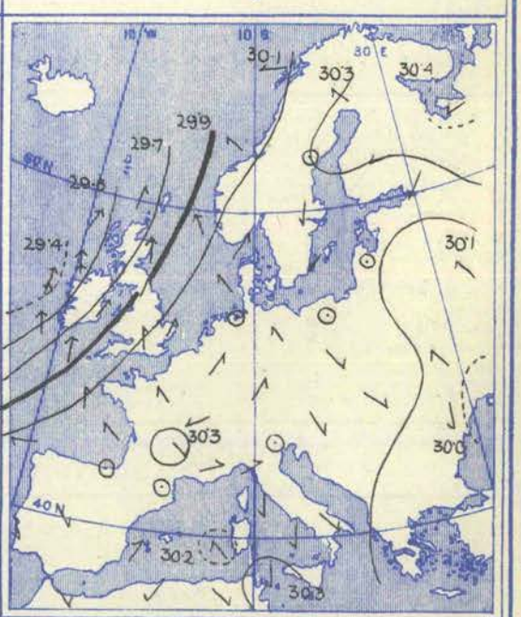
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast at all except some of the most southern stations. Rainy on our western and southern coasts, and snow falling at Moscow and in Sweden. A good deal of fog prevailing over France and the central portion of the Continent. Slight rain at most English and Scotch stations later, and heavier amounts in the west of Ireland and south of Russia.

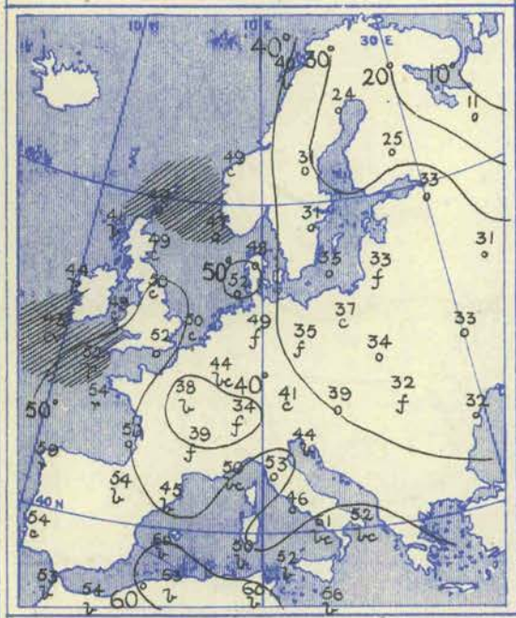
Temperature fallen generally. Readings at 8 a.m. highest, 61° at Algiers, 60° at Palma, and 59° at San Fernando and Corunna. Lowest, (1) 15° at Archangel, 19° at Haparanda, and 30° at Kharkov, Moscow, and Bodö, (2) 33° at Limoges, (3) 36° at Florence. Maxima during day, 56° at Nairn and on our most south-western coasts, above 60° in the southern regions of Europe generally, and as high as 70° or above in some parts of Spain and Algeria. Readings remaining below 40° at some Polish stations, and below 32° in the extreme north of our area.

Wind at 8 a.m. strong to a gale from the Southward on all our western coasts, and light from South or South-West over our eastern districts. Very variable and light elsewhere—anticyclonic over France and Lapland, and cyclonic over Russia and the Mediterranean. Not much change as a whole later, but a further increase in the force of the Southerly current taking place on our own western coasts.

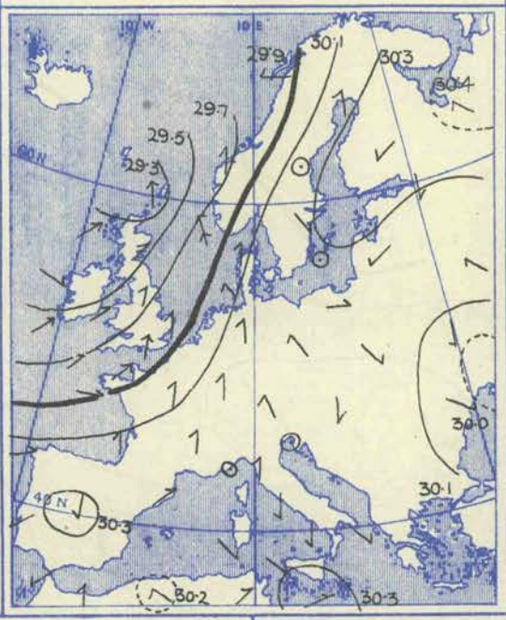
Barometer in morning ranging from 30·4 ins. and upwards in an anticyclone over the White Sea, and almost as high in another system over central France, to below 30·2 ins. in a depression over Sardinia, less than 30·0 ins. in (1) a disturbance over Russia, and (2) in another over Greece and Turkey, and to 29·7 ins. and less in a minimum off our own north-west coasts. Last mentioned system continuing to spread eastwards over the United Kingdom during day, and gradients increasing steadily.

Saturday, 14th November, 1903.

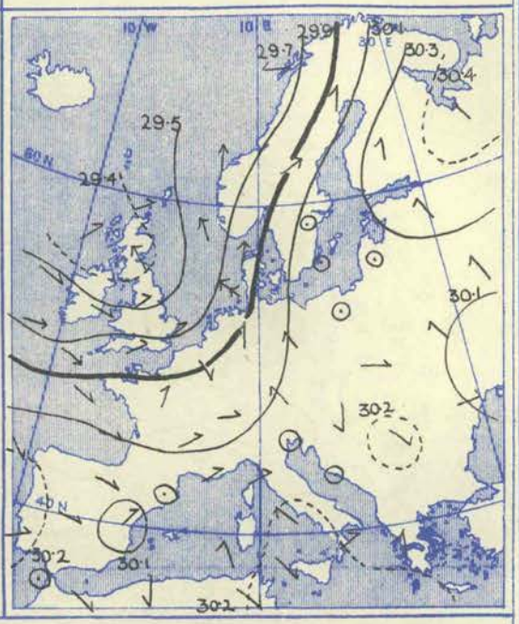
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull excepting in Algeria, the south of Italy, the major portion of Spain, and the south-east of France. Rain falling at Corunna, and showers at some stations in Ireland and England. Fog prevailing in the east of France and over Germany and Hungary. Rain falling later in most parts both of these Islands and the Continent—more than 0·5 in. at several of our stations and as much as 0·9 in. at Kharkov, and 1·2 ins. at Cherbourg.

Temperature risen in Scandinavia, fallen in most other regions. Readings at 8 a.m. ranging from 63° at Algiers and 59° at Corunna, to below 50° over the greater part of the United Kingdom, to below 40° over the major portion of Continental Europe, to 31° at Moscow, 20° at Uleaborg, and 11° at Archangel. Rising subsequently to 57° at Scilly, to 60° and above at several stations in the south of Europe, to 70° at San Fernando, and to 72° at La Calle. Maxima low over the central and northern countries.

Wind in morning moderate or fresh from between South-West and South over all the north-western countries, and light or moderate from between North-East and North-West in the south of Russia. Light variable airs prevailing in all the intervening regions. Veering towards West, and increasing in force on our western coasts later and backing to South-East, and increasing to a gale on the west coast of Denmark.

Barometer at 8 a.m. ranging from above 30·4 ins. in the north of Russia, and above 30·3 ins. in Spain and over the central part of the Mediterranean, to 29·9 ins. and less in the south of Russia, and to below 29·3 ins. in a large depression off the north of Scotland. Latter system travelling away northwards by evening, but a secondary disturbance moving eastwards across Scotland. Anticyclone maintaining its position in the north of Russia, but pressure giving way somewhat in the Mediterranean and Spain.

IV.—GENERAL NOTES, etc.

The general distribution of barometric pressure over Europe underwent rather frequent and great changes during the week, but as a whole the highest pressures were found in the southern and south-western parts of our area, while the cyclonic systems mostly travelled north-eastwards or eastwards over the north-western countries. Shallow disturbances were, however, occasionally found in the south and south-east, and towards the end of the period the mercury became high in the extreme north of Russia. The winds were very variable on the Continent and generally of little strength; on Tuesday, however, very strong Northerly to Westerly gales were experienced over Denmark and Norway, and on several subsequent days the wind attained considerable force in those countries. Over the United Kingdom the direction of the wind varied between South and West; it occasionally blew freshly or strongly, but only rose to the strength of a gale on Friday, and then only on the western and north-western coasts. Temperature showed a downward tendency, and on the Continent began to assume a more winter-like distribution. Severe frost was of nightly occurrence in the far north, and slight frost in several regions further south. Rain fell rather frequently over the most northern countries, and at times in various Mediterranean districts. In Sweden, Finland, and Russia snow was not uncommon. Over the Iberian Peninsula and France the weather was finer and rain infrequent.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 266.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	17·5	+ 7·9	32	+ 14
STRATHPEFFER SPA	10·7	- 0·4	19	- 1
EDINBURGH	8·1	- 3·4	14	- 6
COCKLE PARK	13·3	—	23	—
NEWCASTLE-ON-TYNE	7·5	—	13	—
YORK	6·3	- 3·7	11	- 6
CROMER	3·2	—	5	—
LOWESTOFT	1·4	—	2	—
DUNMOW	2·7	—	4	—
SHEFFIELD	7·7	—	13	—
WORKSOP	4·6	- 7·1	8	- 12
THURCASTON	6·5	- 6·3	11	- 10
TUNBRIDGE WELLS	3·9	—	6	—
MARGATE	2·6	- 12·8	4	- 21
BROADSTAIRS	3·5	—	6	—
RAMSGATE	—	—	—	—
EASTBOURNE	6·5	- 9·5	10	- 15
BRIGHTON	7·0	- 9·9	11	- 16
WORTHING	6·3	—	10	—
BOGNOR †	6·0†	—	10†	—
WATERGATE PARK	4·0	—	6	—
WESTBOURNE †	6·1†	- 9·3	10†	- 15
VENTNOR HOSPITAL	6·7	- 9·7	11	- 15
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	7·0	- 5·7	11	- 9
SOUTHPORT	10·4	—	17	—
RHYL	12·4	—	20	—
ABERDOVEY †	11·1†	—	8†	—
TENBY	7·6	- 6·8	12	- 11
TORQUAY	12·6	- 3·0	20	- 5
NEWQUAY	6·5	- 12·0	10	- 19
GUERNSEY †	14·5†	- 1·1	23†	- 2

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX, No. 38, p. 224 ..	Pembroke	—	—	—	56·1	—	+ 3·3	119	0	—	—	—	—	—	—	—
" " " 39, p. 230 ..	Arlington	—	—	—	—	—	—	—	—	—	2·23	+ 0·97	—	—	—	—
" " " 41, p. 242 ..	Glencarron	—	—	49·8	—	45·6	+ 0·3	27	—	—	—	—	—	—	—	—
" " " " " " ..	Prestwich	—	—	—	—	—	—	—	—	—	—	—	16·5	—	22	—
" " " 42, p. 248 ..	Leith	—	—	—	42·4	48·7	+ 1·6	47	—	—	—	—	—	—	—	—
" " " " " " ..	Armagh	—	—	—	—	—	—	—	—	—	0·71	+ 0·06	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 46.] *Third Series.* WEEK ENDING SATURDAY, NOVEMBER 21ST, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 272.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	53	25	45·5	36·1	40·8	0 (average)	10	− 7	23	+ 5	1891	− 77	537	− 99
	1. SCOTLAND, EAST	52	28	45·6	35·7	40·7	0 (average)	10	− 8	25	+ 2	2137	−181	575	−127
	2. ENGLAND, N.E.	53	24	47·0	34·9	41·0	1 below	14	− 7	29	+13	2534	− 2	385	−164
	3. ENGLAND, EAST	54	26	47·0	34·5	40·8	2 below	14	−11	30	+13	3046*	+106	361	−240
	4. MIDLAND COUNTIES	57	24	46·2	33·0	39·6	3 below	12	−11	34	+15	2793	− 93	411	−218
	5. ENGLAND, SOUTH	55	23	47·5	34·9	41·2	3 below	15	−18	29	+18	3239	− 2	237	−198
Principal Grazing Districts.	6. SCOTLAND, WEST	52	25	46·8	36·8	41·8	1 below	13	−10	22	+ 9	2445	− 34	356	−123
	7. ENGLAND, N.W.	54	23	47·0	35·8	41·4	2 below	14	−11	25	+14	2731	+ 7	296	−140
	8. ENGLAND, S.W.	56	25	48·9	36·9	42·9	2 below	28	− 8	14	+ 6	3146	+106	176	−157
	9. IRELAND, NORTH	53	27	48·4	37·7	43·1	0 (average)	26	+ 1	12	0	2533	− 87	313	− 94
	10. IRELAND, SOUTH	54	22	49·3	35·9	42·6	2 below	30	− 4	17	+ 7	3018	+ 30	216	− 80
	— CHANNEL ISLANDS	56	39	52·3	43·2	47·8	1 below	41	−11	0	− 2	3689	+116	49	− 73

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 272.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	15	3 more	233	+35	60·4	+17·9	6	− 1	11	− 2	1007	− 80	24	− 2
	1. SCOTLAND, EAST	5	4	3 less	206	+34	36·0	+ 8·6	12	+ 1	22	+ 2	1145	−104	28	− 3
	2. ENGLAND, N.E.	4	4	2 less	175	+17	28·4	+ 6·1	18	+ 6	31	+10	1244	− 83	30	− 2
	3. ENGLAND, EAST	4	3	3 less	157	− 1	27·4	+ 5·9	15	+ 2	26	+ 4	1408	−113	34	− 3
	4. MIDLAND COUNTIES	3	1	4 less	171	+19	32·2	+ 7·8	17	+ 6	29	+11	1231	− 82	30	− 2
	5. ENGLAND, SOUTH	3	1	6 less	174	+26	32·3	+ 7·6	19	+ 5	32	+ 9	1492	− 39	37	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	5	6	7 less	216	+39	59·7	+16·6	23	+14	41	+25	1261	− 37	31	− 1
	7. ENGLAND, N.W.	4	4	4 less	202	+34	40·1	+ 9·6	20	+12	34	+21	1351	+ 69	33	+ 2
	8. ENGLAND, S.W.	4	2	7 less	194	+24	42·9	+ 9·2	22	+ 8	36	+13	1467	− 98	36	− 2
	9. IRELAND, NORTH	5	3	6 less	233	+32	42·2	+10·5	13	+ 1	23	+ 1	1145	− 67	28	− 2
	10. IRELAND, SOUTH	4	2	8 less	212	+32	43·1	+ 8·1	19	+ 4	32	+ 6	1281	−103	31	− 3
	— CHANNEL ISLANDS	5	3	6 less	207	+34	32·8	+ 4·7	18	+ 2	29	+ 3	1704	−103	42	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week varied a good deal, but it was on the whole fair and dry except in the extreme north and north-west, where rain was of almost daily occurrence. A good deal of mist or fog was experienced over the inland parts of England about the middle of the week.

Temperature was below the mean generally, but just equal to it in the north and east of Scotland and the north of Ireland. The highest of the maxima were recorded on Saturday, when they ranged from 57° in the Midland Counties and 56° in England S.W. and the Channel Islands, to 52° in Scotland E. and W. During the greater part of the period, the daily maxima were below 50°. The lowest of the minima, which were mostly recorded about the middle of the week, were as low as 22° in Ireland S., 23° in England S. and N.W., and between 24° and 28° in all other districts except the Channel Islands, where the lowest value was 39°.

Rainfall was less than the mean in all districts except Scotland N.; the fall over the southern half of England and the south of Ireland was very slight.

Bright Sunshine exceeded the mean in all districts except Scotland N., the excess in most places being very considerable. The percentage of the possible duration ranged from 41 in Scotland W. and 36 in England S.W., to 26 in England E., 22 in Scotland E., and to 11 in Scotland N.

Barometer and Wind. During the early days of the week depressions were travelling south-eastwards over the North Sea and our north-eastern districts, while the barometer became relatively high in the west. This high pressure then increased in intensity and spread gradually eastwards to Denmark. Towards the end of the period, however, a large depression appeared in the far north, while its secondaries affected our own northern and western districts. The wind was at first mainly Northerly or North-Westerly and of moderate force, but by the middle of the week it became light and showed a distinct anticyclonic movement, while later on it shifted to West or North-West very generally, and blew a strong breeze to a strong gale on all parts of our coasts.

2041*r*. Wy. & S. Ltd
370 11 | 03

II.—DATA from which the SUMMARY on page 271 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	49	32	43·6	36·9	40·3	− 1·6	4	19	7	1·27	+ 0·31	*	*	*	*
	Stornoway	51	32	46·9	37·9	42·4	+ 0·8	20	11	6	1·09	− 0·16	10·0	+ 1·1	19	+ 2
	Wick	49	31	46·0	36·6	41·3	0·0	11	22	7	1·41	+ 0·74	*	*	*	*
	Lairg Ⓢ	46	25	42·6	33·6	38·1	− 0·4	2	30	5	1·55	+ 0·71	*	*	*	*
	Glencarron Ⓢ	50	30	45·4	35·4	40·4	+ 0·1	10	25	7	3·85	+ 1·60	*	*	*	*
	Fort Augustus Ⓢ	51	26	46·9	35·0	41·0	− 0·2	14	28	5	0·60	− 0·44	1·7	− 2·2	3	− 4
	Fort William	53	30	46·9	37·4	42·2	0·0	21	13	6	0·83	− 1·03	6·0	+ 0·3	11	+ 1
1. SCOTLAND, E.	Nairn	52	32	46·6	36·0	41·3	+ 0·8	13	24	5	0·56	+ 0·05	*	*	*	*
	Aberdeen	49	34	44·7	36·3	40·5	− 1·0	8	22	6	1·00	+ 0·29	9·0	− 2·7	17	− 5
	Braemar Ⓢ	46	28	41·8	33·6	37·7	− 0·1	0	30	7	0·62	− 0·23	*	*	*	*
	Ochtertyre Ⓢ	52	28	47·3	35·4	41·4	+ 0·9	15	27	4	0·08	− 0·93	*	*	*	*
	Leith	52	33	48·4	37·9	43·2	+ 0·6	26	11	2	0·04	− 0·43	*	*	*	*
	Marchmont Ⓢ	50	31	45·0	34·9	40·0	− 0·2	8	27	5	0·28	− 0·48	14·8	+ 3·3	27	+ 6
2. ENGLAND, N.E.	Alnwick Castle	53	27	46·1	34·9	40·5	− 1·5	11	28	5	0·61	− 0·14	*	*	*	*
	Durham	50	24	44·6	33·0	38·8	− 2·4	7	33	2	0·23	− 0·37	15·4	+ 3·9	28	+ 7
	Shields	51	30	46·9	35·0	41·0	− 1·3	14	28	4	0·64	+ 0·11	*	*	*	*
	Scarborough Ⓜ	53	31	47·6	35·8	41·7	− 1·3	16	26	6	0·44	− 0·20	15·8	—	28	—
	Spurn Head	53	35	47·7	36·7	42·2	− 1·4	24	15	4	0·39	− 0·11	*	*	*	*
	Fulbeck (Lincolnshire)	52	29	48·9	34·0	41·5	+ 0·2	19	33	1	0·18	− 0·26	20·7	—	36	—
3. ENGLAND, E.	Hillington Ⓜ	52	28	45·0	33·3	39·2	− 2·6	8	33	4	0·59	− 0·01	12·9	+ 0·9	22	+ 2
	Yarmouth	52	33	46·6	36·1	41·4	− 1·9	13	24	5	0·35	− 0·29	*	*	*	*
	Geldeston	53	30	46·5	34·2	40·4	− 2·7	13	31	6	0·50	− 0·07	18·3	+ 4·5	31	+ 8
	Cambridge	54	27	51·0	33·0	42·0	− 0·3	25	25	2	0·15	− 0·29	10·5	− 2·9	18	− 5
	Felixstowe	53	32	46·4	36·2	41·3	− 1·9	12	23	4	0·33	—	17·7†	—	30†	—
	Rothamsted	53	26	45·8	33·2	39·5	− 2·4	11	33	6	0·09	− 0·53	19·3	+ 6·2	32	+ 10
	Shoeburyness	54	32	47·4	35·7	41·6	− 2·1	15	26	2	0·12	− 0·36	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	50	30	45·7	34·6	40·2	− 1·2	10	29	3	0·17	− 0·49	27·8	—	49	—
	Bawtry (Hesley Hall)	53	25	47·0	32·6	39·8	− 1·9	14	36	2	0·12	− 0·34	*	*	*	*
	Nottingham	53	26	46·3	31·9	39·1	− 3·2	12	38	2	0·06	− 0·40	9·6	—	17	—
	Loughborough	53	24	46·3	31·3	38·8	− 3·5	12	40	2	0·02	− 0·49	*	*	*	*
	Colly Weston (Stamford)	57	30	46·0	32·7	39·4	− 2·7	11	36	4	0·14	− 0·41	*	*	*	*
	Cheadle Ⓜ	51	31	44·5	33·3	38·9	− 2·4	7	32	5	0·35	− 0·33	*	*	*	*
	Birmingham (Edgbaston)	53	30	45·2	35·6	40·4	− 1·9	9	25	3	0·13	− 0·42	9·6	—	16	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	54	24	47·7	32·7	40·2	− 2·7	16	37	4	0·05	− 0·52	*	*	*	*
	Cirencester	56	24	46·7	31·4	39·1	− 2·5	13	41	2	0·14	− 0·53	20·9	+ 8·5	35	+ 14
	Oxford	54	29	46·7	33·4	40·1	− 2·9	13	34	2	0·07	− 0·46	15·9	+ 3·2	27	+ 5
5. ENGLAND, S.	London	55	29	47·3	34·1	40·7	− 3·0	15	31	2	0·07	− 0·45	9·1‡	+ 1·4‡	15‡	+ 2‡
	Swarraton (Alresford) Ⓜ	54	23	46·0	29·7	37·9	− 4·3	11	46	2	0·12	− 0·60	*	*	*	*
	Dungeness	54	30	48·6	33·9	41·3	− 3·7	18	33	4	0·29	− 0·29	19·6	--	33	—
	Hastings (St. Leonards)	54	33	47·0	36·2	41·6	− 3·2	14	24	2	0·11	− 0·64	25·2	+ 9·7	41	+ 16
	Southampton	55	30	48·6	36·0	42·3	− 2·4	27	17	3	0·15	− 0·56	17·6	+ 4·3	29	+ 7
	Portland Bill	54	35	49·7	40·3	45·0	− 1·4	28	5	1	0·01	—	*	*	*	*
	Shaftesbury Ⓜ	50	31	45·4	34·4	39·9	− 2·0	10	29	4	0·19	− 0·61	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	50	31	46·6	38·6	42·6	− 0·7	18	10	7	1·44	− 0 51	*	*	*	*
	Glasgow	51	31	46·1	38·1	42·1	+ 0·3	17	11	5	0·14	− 0·73	17·1	+ 11·5	31	+ 21
	Cally Ⓢ	51	25	47·4	35·2	41·3	− 0·6	15	28	4	0·65	− 0·58	*	*	*	*
	Aspatria	49	27	45·2	34·2	39·7	− 2·3	9	30	4	0·31	—	21·1	—	38	—
	Douglas (Isle of Man)	52	30	48·6	37·8	43·2	− 1·2	26	12	5	0·28	− 0·79	30·0	+ 16·6	53	+ 29
7. ENGLAND, N.W.	Newton Rigg	50	23	44·9	30·3	37·6	− 2·2	8	43	4	0·20	—	20·7	—	37	—
	Stonyhurst	49	28	43·8	34·6	39·2	− 3·0	5	27	5	0·73	− 0·30	23·4	+ 13·8	40	+ 24
	Blackpool Ⓜ	52	24	48·3	35·1	41·7	− 1·5	18	29	4	0·49	− 0·28	27·9	+ 18·2	48	+ 31
	Manchester (Prestwich)	51	26	44·6	34·1	39·4	− 2·9	7	30	5	0·71	− 0·08	11·8	—	20	—
	Liverpool Obsy. (Bidston)	52	30	47·3	37·4	42·4	− 1·3	22	13	4	0·32	− 0·31	—	—	—	—
	Chester (Hawarden Bridge)	54	27	48·7	34·9	41·8	− 2·2	19	30	4	0·29	—	*	*	*	*
	Llandudno Ⓜ	53	32	48·6	40·1	44·4	− 0·9	25	5	4	0·30	− 0·47	10·9	+ 5·4	29	+ 9
	Holyhead	52	35	49·1	41·1	45·1	− 1·2	25	3	3	0·18	− 0·75	*	*	*	*
	Bettws-y-Coed	53	26	47·5	34·4	41·0	− 4·2	15	31	6	0·60	—	14·1	—	24	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	54	35	50·3	41·1	45·7	− 1·4	30	3	4	0·04	− 0·87	17·7	+ 4·0	30	+ 7
	Clifton	54	29	47·9	36·2	42·1	− 1·4	25	16	2	0·14	− 0·62	*	*	*	*
	Bath	56	25	48·4	33·4	40·9	− 3·3	18	35	3	0·17	− 0·51	18·1	—	30	—
	Arlington (N. Devon)	52	29	47·4	36·0	41·7	− 1·9	15	25	5	0·55	− 0·31	*	*	*	*
	Cullompton Ⓜ	55	27	48·6	32·7	40·7	− 2·7	18	38	4	0·13	− 0·72	19·5	+ 7·8	32	+ 13
	Falmouth	54	36	49·5	40·9	45·2	− 2·2	27	3	6	0·32	− 0·91	30·5	+ 14·7	50	+ 24
	Plymouth	55	33	50·1	38·1	44·1	− 2·3	31	11	5	0·11	− 0·73	23·1	+ 9·2	38	+ 15
9. IRELAND, N.	Malin Head	51	39	48·3	41·7	45·0	+ 0·6	22	1	6	0·29	− 0·45	*	*	*	*
	Edenfel (Omagh)	51	30	47·3	34·3	40·8	− 0·5	15	31	6	0·27	− 0·57	*	*	*	*
	Blacksod Point	53	39	50·9	43·9	47·4	+ 2·1	38	0	6	0·25	− 0·99	*	*	*	*
	Markree Castle	52	27	48·6	34·8	41·7	− 1·6	18	30	6	0·57	− 0·36	9·5	− 2·9	17	− 5
	Armagh	51	32	47·4	35·8	41·6	− 0·7	15	25	2	0·07	− 0·60	16·9	+ 3·9	30	+ 7
	Donaghadee	52	34	48·1	35·9	42·0	− 1·9	17	17	5	0·13	− 0·60	*	*	*	*
10. IRELAND, S.	Dublin	53	30	47·6	36·7	42·2	− 2·8	24	15	3	0·04	− 0·56	23·6	+ 7·6	41	+ 13
	Birr Castle	53	24	48·1	31·6	39·9	− 2·8	17	41	3	0·05	− 0·62	20·0	+ 5·7	35	+ 10
	Kilkenny	54	22	48·6	31·9	40·3	− 3·4	18	40	3	0·05	− 0·62	*	*	*	*
	Waterford	54	26	50·0	34·7	42·4	− 1·8	33	20	0	0·00	− 0·94	*	*	*	*
	Roche's Point	54	35	50·0	39·1	44·6	− 2·0	30	8	4	0·07	− 1·03	*	*	*	*
	Valencia	54	33	51·4	39·7	45·6	− 1·7	35	6	6	0·23	− 1·10	12·5	− 2·2	21	− 4
	Killarney	54	30	50·6	36·7	43·7	− 1·6	34	15	5	1·01	− 0·46	*	*	*	*
	Foynes	52	29	47·7	36·5	42·1	− 2·6	24	15	4	0·16	− 0·82	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	42	52·4	43·7	48·1	− 1·3	43	0	4	0·07	− 0·79	24·2	+ 7·5	40	+ 12
	Jersey	56	39	52·1	42·6	47·4	− 0·6	38	0	5	0·57	− 0·37	19·1	+ 2·4	31	+ 4

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

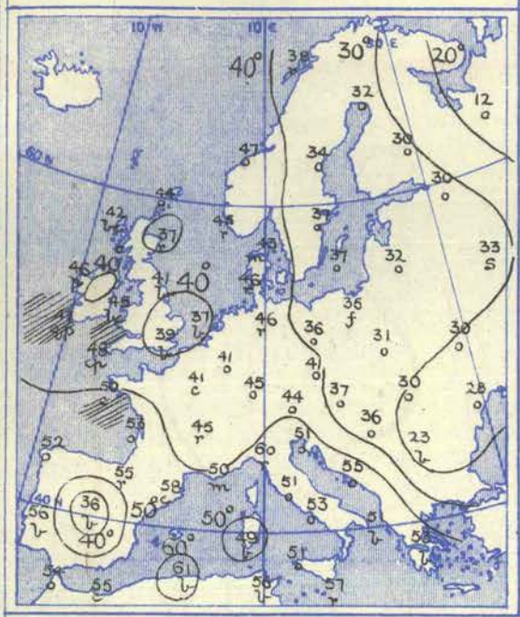
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 15th November, 1903.

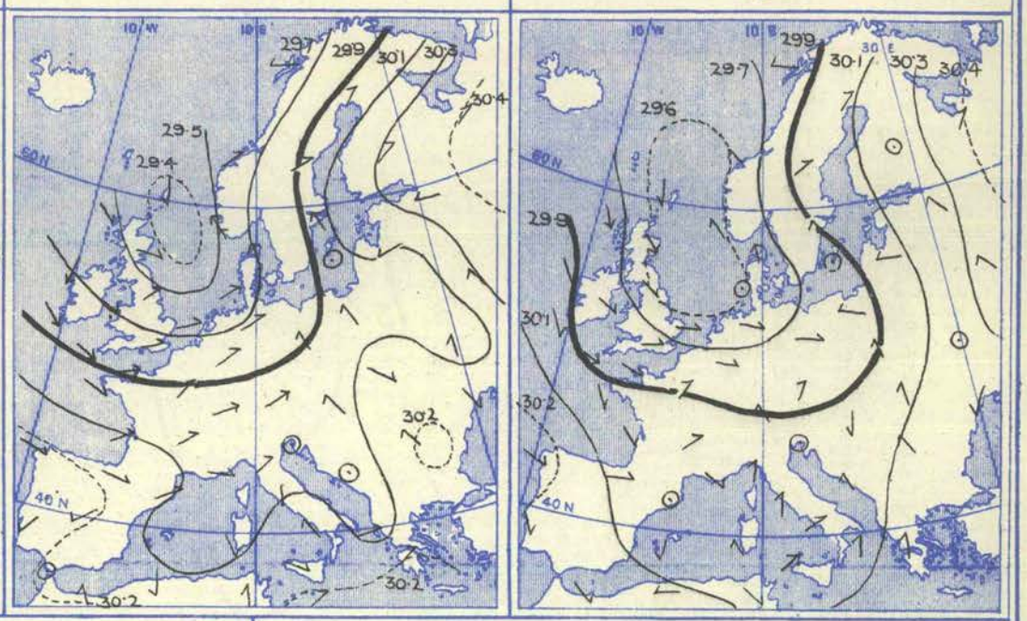
Temperature and Weather. 8 a.m.



Weather in morning fine and bright in many parts of England and Ireland, the Riviera, and Algeria; cloudy or dull in all other regions, with showers at some of our own western and northern stations, rain in Denmark and several parts of France, and snow at Moscow. Considerable falls occurring during the ensuing twenty-four hours in many Continental localities, and smaller amounts at many of our own stations.

Temperature fallen in most places. Readings in morning highest, 61° at Algiers, 58° at Barcelona, 56° at Lisbon, and 55° at Biarritz. Lowest, (1) 12° at Archangel, (2) 23° at Hermanstadt, 24° at Cracow, and 28° on the northern shores of the Black Sea, (3) 34° at Nottingham, (4) 36° at Madrid. Maxima during day about 70° at some stations in the extreme south, and above 60° in the south-east of France, but below 50° over the major portion of Europe, and below 40° in many northern and central regions. Frost at night in France and several parts of the United Kingdom.

Barometer and Wind. 8 a.m. and 6 p.m.

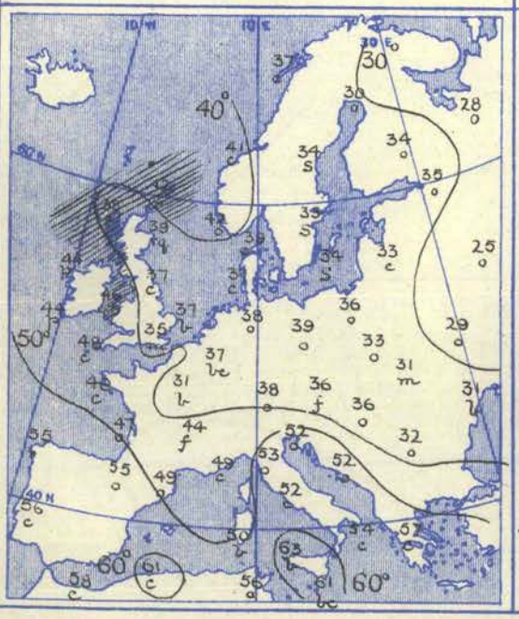


Wind at 8 a.m. showing an extensive cyclonic circulation around the North Sea; North-Westerly current fresh to a moderate gale on our northern and western coasts, and that from South-East equally strong in the north of Denmark and south of Norway. Light winds from no general direction prevailing over the major portion of the Continent. Little change later except a gradual decrease of force over our Islands and their neighbourhood.

Barometer in morning ranging from 30·4 ins. in the north of Russia and above 30·2 ins. in Spain and Transylvania to less than 29·3 ins. in a depression lying over the northern portion of the North Sea. Latter system becoming much less deep and of less regular form by evening, and a shallow disturbance appearing over the Riviera and northern Italy.

Monday, 16th November, 1903.

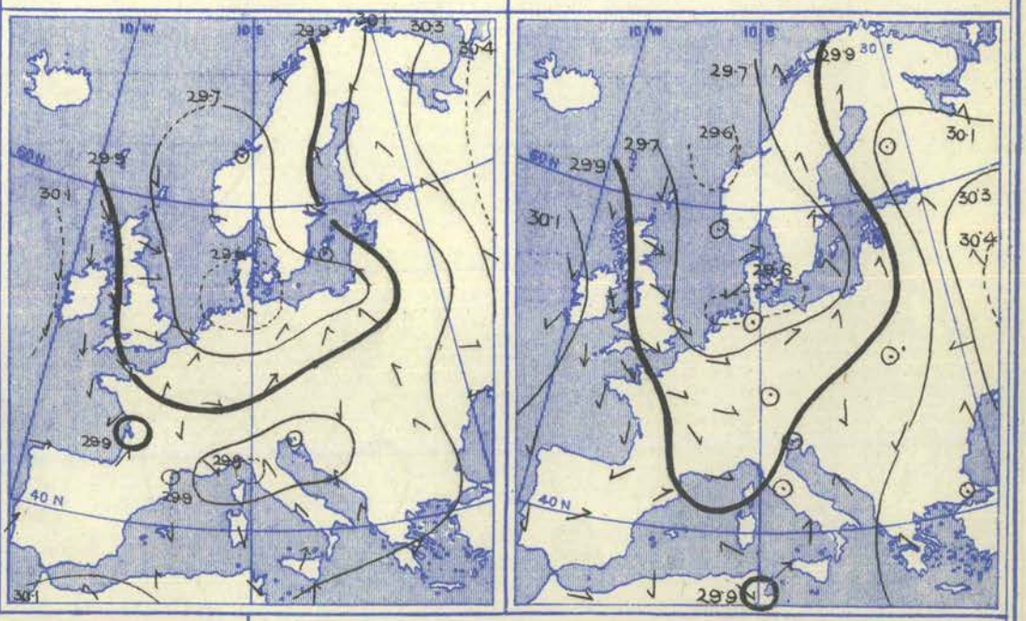
Temperature and Weather. 8 a.m.



Weather in morning fine and bright in a few isolated places, but cloudy or dull as a whole throughout our area. Showery at some of our own western and northern stations, rain falling at Corunna and Copenhagen, and snow in Sweden. Rain, mostly in small amounts, experienced later in nearly all countries, and considerable falls of snow in northern Europe.

Temperature fallen generally, but risen at some stations in central Europe, and also in the extreme north and south. Readings at 8 a.m. highest, 63° at Palermo, 61° at Malta and Athens, 58° at Palma, and 57° in Greece. Lowest, (1) 25° at Moscow and Nicolaieff, and below 32° over Russia generally, (2) 31° at Paris and Le Mans, (3) 32° at Nottingham and Parsonstown. Maxima during day below 45° in many parts of Great Britain, and only 46° at Paris, Belfort, and Carlsruhe, but above 60° on most shores of the Mediterranean and at Madrid and Lisbon, as high as 72° at Palermo, and 73° at Algiers and Tunis.

Barometer and Wind. 8 a.m. and 6 p.m.

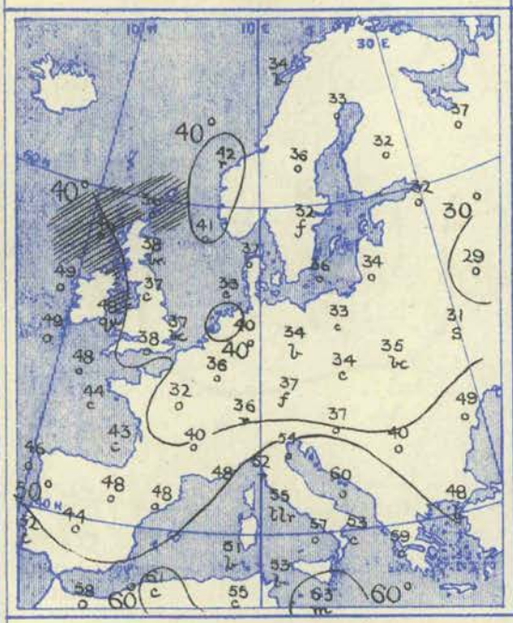


Wind at 8 a.m. showing three cyclonic movements—one around the south-eastern part of the North Sea, another over southern Europe, and a third over the south-west of France. Not much force as a whole, but Northerly current fresh or strong over the United Kingdom, with a slight gale at Holyhead. Two latter movements dying out during day, and that over the North Sea becoming less well marked.

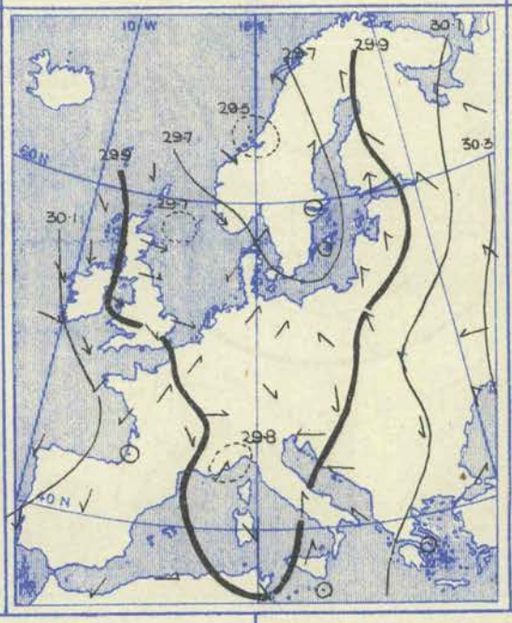
Barometer in morning ranging from about 30·4 ins. in the north of Russia, and about 30·1 ins. in the west of Ireland, to 29·9 ins. and less in a small depression over the south-west of France, to below 29·8 ins. in a small minimum near Leghorn, and to 29·6 ins. and less in a large disturbance near Heligoland. All the low pressure systems disappearing or becoming less deep later. Barometer falling briskly in the north of Russia, rising slowly along our western coasts.

Tuesday, 17th November, 1903.

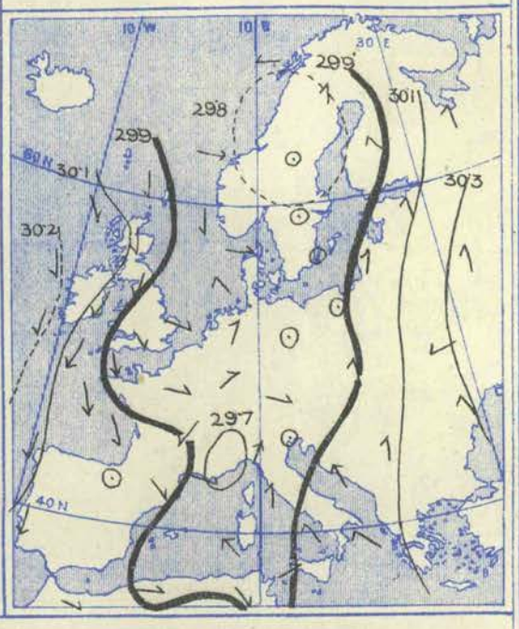
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast in nearly all places, with rain at Christiansund, Munich, and Florence, showers at some of our western stations, and snow at Kiev. Fog prevailing at Stockholm, Copenhagen, and in some parts of Austria, and a thunderstorm at Rome. Slight rain experienced later in most British districts, larger amounts in the north and west of France and the Netherlands, and more than an inch at Florence and Rome.

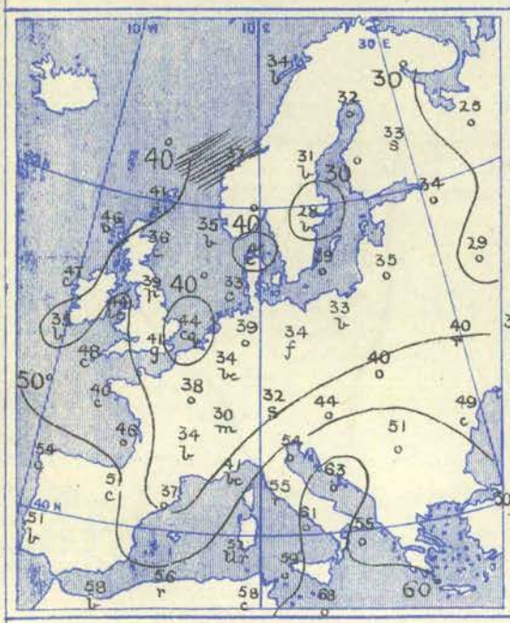
Temperature fallen in most places. Readings at 8 a.m. highest, 63° at Malta, 61° at Algiers, 60° at Lesina, and 59° at Athens. Lowest, (1) 21° at Kharkov, 29° at Moscow, and 32° at St. Petersburg, (2) 32° at Paris, 33° at Le Mans, and 38° at Limoges, (3) 44° at Madrid. Rising subsequently to 74° at Palermo, 73° at Algiers, and to between 60° and 70° at the extreme southern stations generally, but thermometer remaining below 45° in most parts of Great Britain and below 40° at some stations in central Europe.

Wind at 8 a.m. fresh to strong from North or North-West over all our western and northern stations (with a gale at Holyhead), and Southerly or South-Easterly over all the eastern parts of our area. The cyclonic circulations of little force prevailing in the intervening regions. Little change later as a whole, but a general increase in force taking place over Italy and the Mediterranean. Wind becoming more Northerly over our Islands.

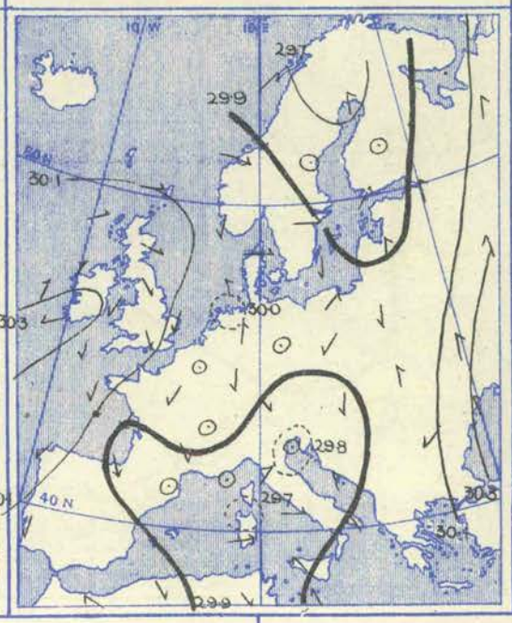
Barometer in morning ranging from 30·4 ins. and upwards in the south-east of Russia, and from above 30·1 ins. off our west and south-west coasts, to 29·8 ins. and less in a depression over the Riviera, to about 29·7 ins. in a minimum over Holstein and in another off Aberdeenshire, and to 29·5 ins. in a depression over the west of Norway. Disturbance over the Riviera growing deeper by evening, but a very general baric rise taking place over the western and northern portions of the United Kingdom.

Wednesday, 18th November, 1903.

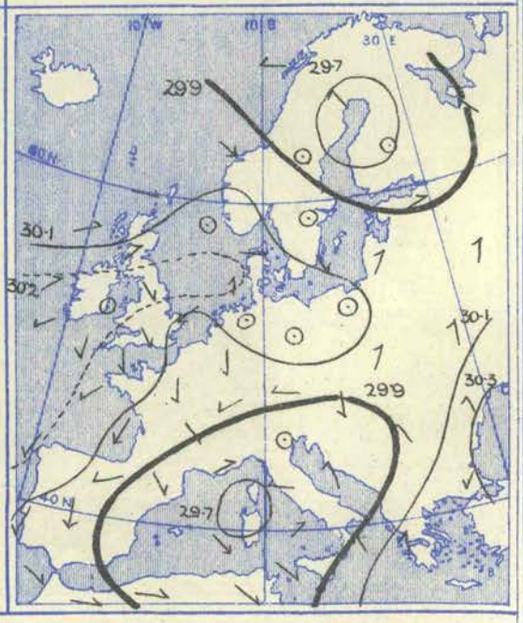
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in nearly all parts of Norway and Sweden, the United Kingdom, and Portugal; cloudy or dull in most other regions, with rain in the Netherlands, in parts of central Europe, and at Rome, and a thunderstorm at Cagliari. Snow falling at Limoges and Kuopio. Heavy rain—with thunder in places—experienced over Italy later, and smaller amounts in several other parts of the Continent. A thunderstorm, accompanied by a waterspout, occurring at Biarritz.

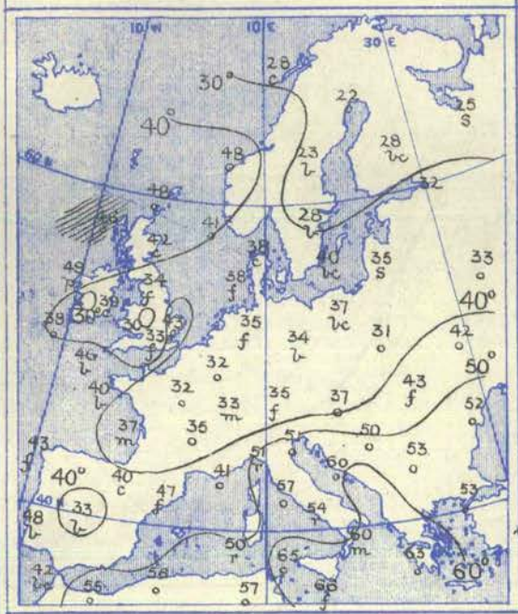
Temperature fallen in most places. Morning readings highest, 68° at Malta, 63° at Lesina, and 58° at La Calle and Oran. Lowest, (1) 25° at Archangel, and below 32° in most parts of Russia and Sweden, (2) 27° at Parsonstown, (3) 30° at Belfort, and 33° at Limoges. Rising subsequently to 77° at Sfax, 74° at Malta, but remaining below 60° in many southern localities, and below 50° over Europe as a whole. Maximum in London and Paris only 44°, at Munich 36°, and at Stockholm 32°.

Wind Westerly to Northerly over the major part of our Islands and the Iberian Peninsula, and Southerly over Russia and its neighbourhood. Irregular cyclonic circulations shown over the intervening regions. Not much force as a whole, but the West-South-Westerly current blowing a moderate gale at Cagliari. No important change later.

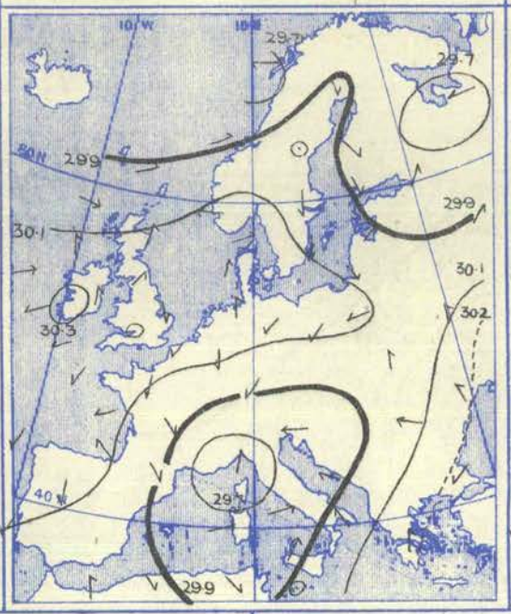
Barometer at 8 a.m. ranging from above 30·4 ins. in the south of Russia, and above 30·3 ins. in Ireland, to 30·0 ins. in a shallow minimum in the neighbourhood of Heligoland, 29·8 ins. in another system over the northern part of the Adriatic, about 29·7 ins. over Sardinia, and below that value in the extreme north of Sweden. Western high pressure spreading eastwards during day, and some of the baric minima disappearing. Barometer falling very gradually over our western and northern districts.

Thursday, 19th November, 1903.

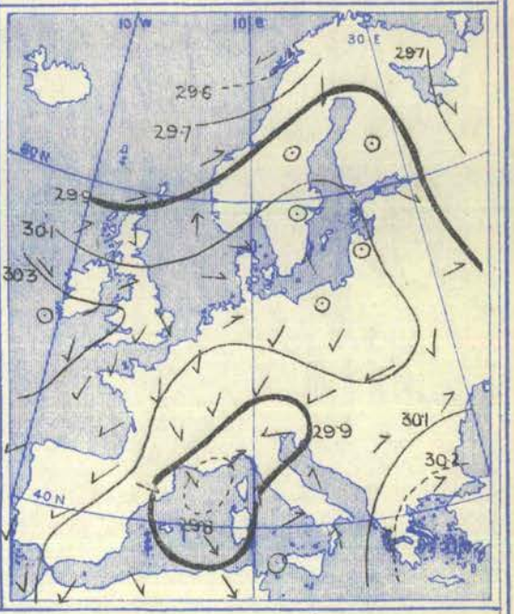
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull as a whole, with fog in many parts of England, Holland, Germany, and Denmark, as well as at Corunna and Turin. Rainy in many Italian localities and at Bilbao, and snow falling at Archangel. Rain experienced later at most of our own north-western and northern stations—as much as 0·7 in. at Sumburgh Head—and heavy falls over the southern countries of the Continent and in Algeria; largest amount, 0·9 in. at Naples.

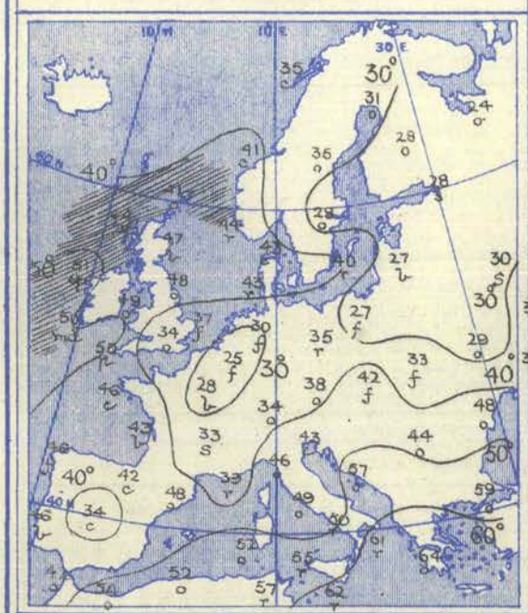
Temperature changed irregularly. Readings at 8 a.m. highest, 66° at Malta, 65° at Palermo, and 63° at Athens. Lowest, (1) 22° at Ulealborg, 23° at Kharkov, and 25° at Archangel, (2) 26° at Parsonstown, and 28° to 32° over central England, (3) 33° at Madrid, (4) 33° at Prague. Maxima during day 72° at Malta and Tunis, and above 60° at some other extreme southern stations. Low generally, only 34° at Hamburg, 36° at Lyons, 39° at Paris, 40° at Nottingham. Frost over England at night.

Wind in morning anticyclonic over the United Kingdom and its immediate neighbourhood, and also over Denmark and the Baltic. Cyclonic circulations shown over the north of Russia and around Corsica, and a partial one over the north-west of Norway. No decided change during day.

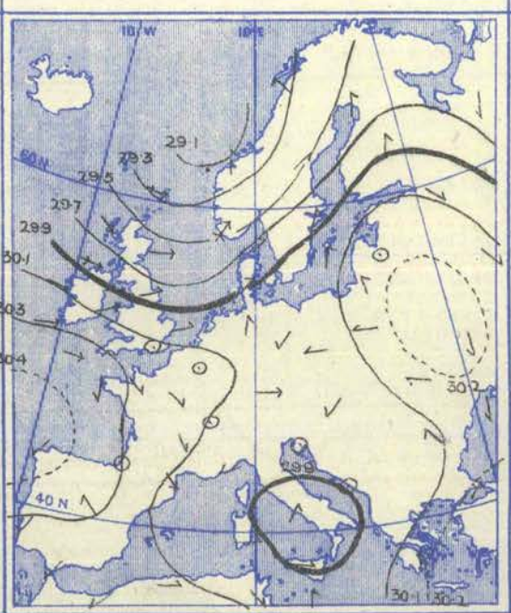
Barometer at 8 a.m. ranging from 30·3 ins. to 30·1 ins. in a large area extending from the Atlantic to the Baltic, and also in the south of Russia to 29·7 ins. and less in a depression over the extreme north of Russia and in another off the north-west of Norway, and to about 29·6 ins. in a deeper disturbance over Corsica. A gradual fall of the barometer taking place later over Scotland and Scandinavia, and a large disturbance appearing in the far north-west during the ensuing night.

Friday, 20th November, 1903.

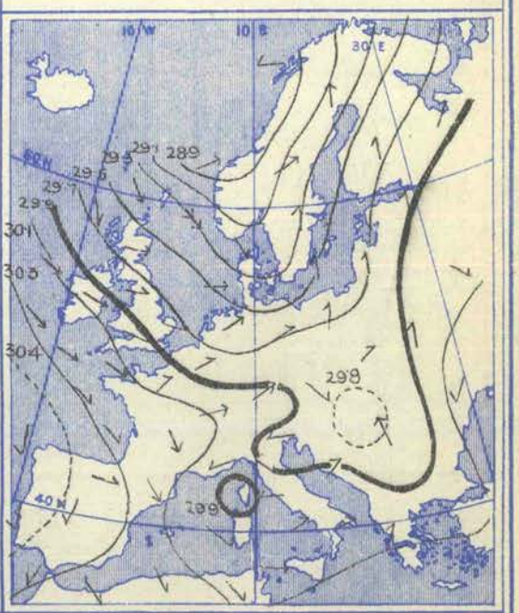
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or overcast at nearly all stations. Rainy over Italy and its neighbourhood, in some parts of central Europe, and showery on our west and north-west coasts. Snow falling at St. Petersburg and Moscow, and rain in the extreme north and south of Sweden. Fog or mist still prevailing at some stations in England, Denmark, the Netherlands, and north Germany. Rain later in almost all parts of our area, but not, as a rule, in large amounts.

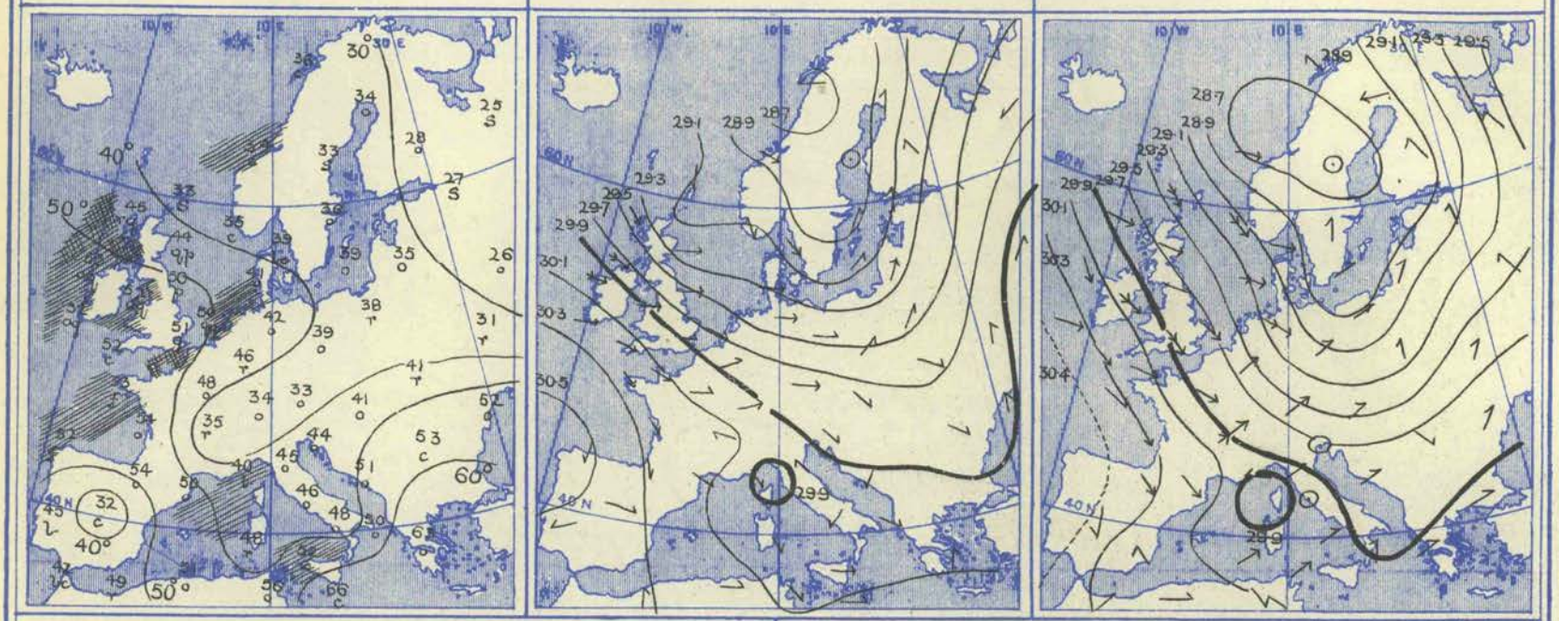
Temperature risen quickly over Ireland, the greater part of England and Denmark and Sweden. Readings at 8 a.m. highest, 64° at Athens, 62° at Malta, and 61° at Brindisi. Lowest, (1) 24° at Archangel, (2) 25° at Brussels, 28° at Paris, and 34° in London, (3) 34° at Madrid, and 41° at Oporto. Subsequently rising to above 50° in most parts of our Islands, to above 60° at some stations in the extreme south of Europe, but not exceeding 35° at Belfort, 41° at Prague, 48° at Pesaro, and 54° at Cagliari.

Wind at 8 a.m. fresh or strong to a gale from West or North-West over the United Kingdom, and equally strong from the South-Westward to the eastward of the North Sea. A complete cyclonic movement of moderate winds prevailing around Italy, and light anticyclonic airs both over the extreme south-west and east of our area. Wind veering to West or North-West on the eastern shores of the North Sea by evening, and continuing to blow strongly.

Barometer at 8 a.m. ranging from above 30·4 ins. over the Bay of Biscay and above 30·2 ins. over the southern districts of Russia to below 29·9 ins. in a depression over Italy, and to about 29·1 ins. in another system off the west of Norway. Norwegian disturbance moving eastwards later, and secondaries appearing in the north of Ireland and to the northward of Scotland. Gradients increasing generally over all the northern countries, and also in the south of France. Barometer rising over Spain and Portugal.

Saturday, 21st November, 1903.

Temperature and Weather. 8 a.m. | **Barometer and Wind.** 8 a.m. | 6 p.m.



Weather at 8 a.m. cloudy or dull and very unsettled generally. Rainy or showery in various localities, and snow falling in northern Russia and at Hernösand. Rain becoming very general later, but weather remaining dry in Spain. Heaviest falls of rain, 2·0 ins. at Cagliari, 1·1 ins. at Patras, 0·7 in. at Munster and Hangö, and 0·6 in. at La Calle.

Temperature risen quickly in England, France, the Netherlands, and north Germany. Fallen in most other regions. Readings in morning highest, 66° at Malta, 63° at Athens, and above 50° in most parts of Ireland and England. Lowest (1) 22° at Kharkov, and below 32° over Russia and Finland generally, (2) 33° at Florence, 46° at Rome, (3) 32° at Madrid, 41° at Oporto, and 42° at San Fernando. Rising later to above 55° at some of our own stations, and to above 60° in southern Europe and Algeria. Highest value, 70° at Alicante.

Wind in morning showing a very extensive cyclonic circulation around Scandinavia, only moderate or fresh in force as a whole, but North-Westerly and Westerly current strong over the United Kingdom, with a gale in places. Another circulation prevailing over the western part of the Mediterranean. Gale becoming general over our Islands later, and extending to all the north-western portions of the Continent, and also over the Baltic.

Barometer at 8 a.m. ranging from above 30·5 ins. over the western coasts of the Spanish Peninsula, and 30·1 ins. in the south of Russia, to below 29·9 ins. in a minimum lying between the French coast and Sardinia, and to about 28·6 ins. in the centre of a large depression with several secondaries, lying over the north of Norway. Gradients steep, or rather so, generally. Northern disturbance moving eastwards during day, and gradients increasing very decidedly over the major portion of our area.

IV.—GENERAL NOTES, etc.

At the commencement of the week pressure was relatively high both over the Spanish Peninsula and the north of Russia, while depressions were shown over the North Sea and the south of France. As the week progressed the Spanish high pressure spread northwards to Ireland, and that over the north of Russia southwards to the south of that country; while over the North Sea, the west of Norway, and Italy there were depressions. By Wednesday the western anticyclone had spread eastwards across Ireland and England to the Continent and almost joined that in the south of Russia, and the only depressions shown on the chart were in the far north and over the Mediterranean. Towards the end of the week, however, a very large and deep disturbance, with several secondaries, spread down the North Sea to Germany, so that the western high pressure area receded to the Bay of Biscay. The winds were very variable both in direction and force: over Italy and its neighbourhood there was a complete or partial cyclonic circulation shown throughout the period, while over our Islands the wind was for a time strong from the Northward, then light and anticyclonic, and finally strong to a gale from between North and West. Strong gales were also experienced over the northern half of the Continent towards the end of the time. The weather was very unsettled and rainy over Italy and in most other Mediterranean regions, while rain or snow frequently fell over northern Europe. Temperature was subject to great fluctuations over the north-western countries, but was as a whole rather low, both there and over our area generally.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 272.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	4·0	− 4·0	8	− 8
STRATHPEFFER SPA	8·4	− 0·6	16	− 1
EDINBURGH	11·8	+ 2·0	22	+ 4
COCKLE PARK	19·4	—	35	—
NEWCASTLE-ON-TYNE	11·3	—	20	—
YORK	16·2	+ 7·8	28	+ 14
CROMER	12·7	—	22	—
LOWESTOFT	13·8	—	23	—
DUNMOW	19·6	—	33	—
SHEFFIELD	17·8	—	31	—
WORKSOP	18·0	+ 8·0	31	+ 14
THURCASTON	15·9	+ 5·0	27	+ 8
TUNBRIDGE WELLS	18·5	—	31	—
MARGATE	13·8	+ 0·2	23	0
BROADSTAIRS	22·0	—	37	—
RAMSGATE	—	—	—	—
EASTBOURNE	25·7	+ 11·4	42	+ 19
BRIGHTON	22·3	+ 7·4	37	+ 12
WORTHING	22·7	—	37	—
BOGNOR	24·3†	—	40†	—
WATERGATE PARK	25·0	—	42	—
WESTBOURNE	23·7†	+ 10·5	39†	+ 17
VENTNOR HOSPITAL	23·5	+ 9·3	39	+ 15
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	14·9	+ 4·2	25	+ 7
SOUTHPORT	25·3	—	44	—
RHYL	16·9	—	29	—
ABERDOVEY	24·1†	—	41†	—
TENBY	—	—	—	—
TORQUAY	24·0	+ 10·0	39	+ 16
NEWQUAY	22·1	+ 5·4	36	+ 9
GUERNSEY	9·8†	− 3·8	16†	− 6

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX, No. 39, p. 230 ..	Cheadle	—	—	—	50·1	55·7	+ 5·3	96	—	—	—	—	—	—	—	—
" " " 43, p. 254 ..	Stornoway	—	—	—	—	—	—	—	—	—	0·87	− 0·33	—	—	—	—
" " " " " " ..	Glasgow	—	—	50·8	—	47·0	+ 2·5	35	—	—	—	—	—	—	—	—
" " " " " " ..	Roche's Point	—	—	—	—	—	—	—	—	—	1·21	+ 0·22	—	—	—	—
" " " 44, p. 260 ..	Liverpool	—	—	—	—	—	—	—	—	—	—	—	24·6	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 47.] *Third Series.* WEEK ENDING SATURDAY, NOVEMBER 28TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 278.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	52	22	41·6	33·2	37·4	3 below	0	−16	32	+11	1891	− 93	569	− 88
	1. SCOTLAND, EAST	54	23	43·1	33·3	38·2	1 below	3	−13	31	+ 5	2140	−194	606	−122
	2. ENGLAND, N.E.	56	31	47·3	37·6	42·4	1 above	21	+ 3	12	− 8	2555	+ 1	397	−172
	3. ENGLAND, EAST	55	32	49·1	38·5	43·9	2 above	28	+ 7	10	−12	3074	+113	371	−252
	4. MIDLAND COUNTIES	59	30	48·4	40·0	44·0	3 above	22	+ 2	6	−17	2815	− 91	417	−235
	5. ENGLAND, SOUTH	54	30	50·3	41·3	45·8	3 above	30	+ 1	2	−13	3269	− 1	239	−211
Principal Grazing Districts.	6. SCOTLAND, WEST	55	32	47·2	39·0	43·2	1 above	21	+ 1	8	− 8	2466	− 33	364	−131
	7. ENGLAND, N.W.	57	32	48·6	41·4	45·0	2 above	24	+ 2	2	−12	2755	+ 9	298	−152
	8. ENGLAND, S.W.	54	32	50·9	44·3	47·6	4 above	39	+ 7	0	−10	3185	+113	176	−167
	9. IRELAND, NORTH	55	38	48·1	41·4	44·8	2 above	22	0	2	−13	2555	− 87	315	−107
	10. IRELAND, SOUTH	57	32	50·6	42·9	46·8	3 above	34	+ 3	0	−11	3052	+ 33	216	− 91
	— CHANNEL ISLANDS	57	44	53·7	47·2	50·5	3 above	60	+13	0	− 2	3749	+129	49	− 75

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 278.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	22	9 more	239	+36	62·7*	+18·9	2	− 5	4	− 9	1009	− 85	24	− 2
	1. SCOTLAND, EAST	6	10	2 more	212	+36	37·0	+ 8·9	9	− 1	17	− 2	1154	−105	28	− 3
	2. ENGLAND, N.E.	4	6	0 (average)	179	+17	29·0	+ 6·1	14	+ 4	26	+ 7	1258	− 79	30	− 2
	3. ENGLAND, EAST	5	10	5 more	162	0	28·4	+ 6·4	11	− 1	19	− 1	1419	−114	34	− 3
	4. MIDLAND COUNTIES	5	10	5 more	176	+20	33·2	+ 8·3	11	+ 1	19	+ 2	1242	− 81	30	− 2
	5. ENGLAND, SOUTH	5	12	5 more	179	+27	33·5	+ 8·2	10	− 2	17	− 4	1502	− 42	36	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	6	21	8 more	222	+40	61·8	+17·4	6	− 2	11	− 3	1267	− 38	30	− 1
	7. ENGLAND, N.W.	6	14	8 more	208	+36	41·5	+10·4	6	− 3	10	− 6	1357	+ 65	33	+ 2
	8. ENGLAND, S.W.	6	15	6 more	200	+26	44·4	+ 9·7	8	− 5	14	− 9	1475	−103	36	− 3
	9. IRELAND, NORTH	7	14	6 more	240	+34	43·6	+11·1	6	− 5	11	− 9	1151	− 72	28	− 2
	10. IRELAND, SOUTH	6	8	2 less	218	+33	43·9	+ 8·0	7	− 7	13	−12	1288	−110	31	− 2
	— CHANNEL ISLANDS	7	13	4 more	214	+36	34·1	+ 5·1	9	− 6	15	−10	1713	−108	42	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather over the United Kingdom was again of a very unsettled and rainy character, especially during the earlier and later days of the period. On Friday a good deal of snow and sleet was experienced in Scotland.

Temperature ranged from 2° to 4° above the mean over the major portion of the Kingdom, but was a little below it in the north and east of Scotland. The highest of the maxima were mostly registered during the earlier half of the period. In the Midland Counties the thermometer rose to 59°, and in England N.W., Ireland S., and the Channel Islands to 57°, but in most other districts the readings did not exceed 55°, while in Scotland N. the maximum was only 52°. Towards the end of the week the maxima in the north and east of Scotland were not much above 32°. The lowest of the minima, which were recorded between the 25th and 27th, were as low as 22° in Scotland N., and 23° in Scotland E., but elsewhere they ranged from 30° in England S. and the Midland Counties, to 33° in Ireland N., and to 44° in the Channel Islands.

Rainfall exceeded the mean in all districts except England N.E. and Ireland S., the excess being very considerable generally, and very large in the extreme N. and N.W. In the western parts of the last-mentioned districts falls of more than 2 ins. were common on Monday, and falls of more than an inch occurred in many parts of the south of England on Friday.

Bright Sunshine was deficient in all districts except England N.E. The percentage of the possible duration ranged from 4 in Scotland N., 10 in England N.W., and 11 in Ireland N. and Scotland W., to 26 in the north-east of England.

Barometer and Wind. During the greater part of the week the barometer was relatively high off our south-west coasts, while the more important cyclonic systems were found to the northward of our Islands. The wind was consequently between South-West and West or North-West in direction and only blew strongly occasionally. By Friday morning, however, a deep depression had arrived over the south of Ireland and another system off the west of Scotland. The former moved quickly eastwards, and produced fresh to strong South-Westerly to Westerly or North-Westerly gales or strong winds in the north and north-west.

2057r. Wy. & S. Ltd.
370 12 | 03

II.—DATA from which the SUMMARY on page 277 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42°	Below 42°	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	48	26	38·6	31·3	35·0	− 6·4	0	49	6	0·80	− 0·17	*	*	*	*
	Stornoway	52	31	43·3	34·4	38·9	− 2·1	4	28	7	2·20	+ 0·95	1·4	− 6·5	3	− 13
	Wick	51	21	42·6	30·7	36·7	− 3·8	2	40	7	1·83	+ 1·15	*	*	*	*
	Lairg Ꞩ	49	22	38·7	30·6	34·7	− 2·7	0	51	4	1·92	+ 1·07	*	*	*	*
	Glencarron Ꞩ	50	28	41·1	33·3	37·2	− 2·2	0	34	7	4·37	+ 2·11	*	*	*	*
	Fort Augustus Ꞩ	51	29	43·1	34·6	38·9	− 1·5	3	27	7	2·46	+ 1·38	0·0	− 3·4	0	− 7
	Fort William	52	32	44·1	37·2	40·7	− 0·8	6	19	6	1·76	− 0·19	1·0	− 3·8	2	− 8
1. SCOTLAND, E.	Nairn	51	23	42·0	31.7	36·9	− 2·8	0	36	7	1·22	+ 0·72	*	*	*	*
	Aberdeen	52	25	43·0	33·4	38·2	− 2·3	3	31	7	1·15	+ 0·43	7·4	− 3·6	15	− 7
	Braemar Ꞩ	50	24	40·1	31·5	35·8	− 1·2	0	43	7	0·71	− 0·12	*	*	*	*
	Ochtertyre Ꞩ	52	30	43·7	33·9	38·8	− 0·8	5	30	7	0·98	− 0·03	*	*	*	*
	Leith	54	31	45·7	36·1	40·9	− 0·8	19	23	4	0·88	+ 0·42	*	*	*	*
	Marchmont Ꞩ	51	29	43·9	33·3	38·6	− 0·7	5	32	5	0·78	+ 9·03	11·3	+ 1·0	22	+ 2
2. ENGLAND, N.E.	Alnwick Castle	54	32	45·1	36·9	41·0	− 0·1	9	20	4	0·66	− 0·08	*	*	*	*
	Durham	54	32	45·5	37·5	41·5	+ 1·3	10	18	4	0·42	− 0·18	15·4	+ 4·6	29	+ 9
	Shields	56	32	46·6	36·1	41·4	− 0·4	13	24	4	0·57	+ 0·03	*	*	*	*
	Scarborough ℳ	53	34	49·0	36·9	43·0	+ 0·9	28	14	4	0·25	− 0·38	10·4	—	19	—
	Spurn Head	53	34	47·3	39·4	43·4	+ 0·9	21	7	3	0·29	− 0·21	*	*	*	*
	Fulbeck (Lincolnshire)	54	31	50·0	38·6	44·3	+ 4·3	30	10	4	1·14	+ 0·70	15·9	—	28	—
3. ENGLAND, E.	Hillington ℳ	53	32	48·0	37·1	42·6	+ 1·9	25	14	4	0·79	+ 0·20	11·1	− 0·2	20	0
	Yarmouth	54	34	48·0	37·4	42·7	+ 0·6	24	13	7	0·48	− 0·15	*	*	*	*
	Geldeston	55	32	49·1	36·8	43·0	+ 1·0	29	15	7	0·32	− 0·24	12·0	− 0·9	21	− 2
	Cambridge	55	34	54·0	38·8	46·4	+ 5·3	44	9	5	1·47	+ 1·03	9·7	− 2·5	17	− 4
	Felixstowe	53	35	47·4	39·6	43·5	+ 1·2	21	7	3	1·07	—	11·3†	—	20†	—
	Rothamsted	53	35	48·5	40·2	44·4	+ 3·5	24	5	5	1·45	+ 0·84	12·4	+ 0·4	22	+ 1
	Shoeburyness	54	35	48·9	39·9	44·4	+ 1·6	26	6	3	1·69	+ 1·23	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	52	33	45·6	36·9	41·3	+ 0·9	10	21	7	0·62	− 0·05	15·3	—	28	—
	Bawtry (Hesley Hall)	55	35	47·6	38·7	43·2	+ 2·6	22	9	4	0·57	+ 0·11	*	*	*	*
	Nottingham	55	35	49·0	40·6	44·8	+ 3·6	25	4	4	1·12	+ 0·68	3·3	—	6	—
	Loughborough	55	36	48·9	40·5	44·7	+ 3·5	25	4	5	1·08	+ 0·57	*	*	*	*
	Colly Weston (Stamford)	59	32	49·3	39·1	44·2	+ 3·4	28	8	5	0·84	+ 0·30	*	*	*	*
	Cheadle ℳ	52	35	47·0	38·2	42·6	+ 2·4	20	11	7	1·60	+ 0·91	*	*	*	*
	Birmingham (Edgbaston)	56	35	49·1	40·0	44·6	+ 3·2	27	6	6	1·07	+ 0·53	6·9	—	12	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford ℳ	56	34	49·9	41·5	45·7	+ 3·9	28	1	5	0·74	+ 0·17	*	*	*	*
	Cirencester	53	30	48·6	39·4	44·0	+ 3·4	25	7	5	1·71	+ 1·04	9·7	− 1·7	17	− 3
	Oxford	54	34	49·4	40·6	45·0	+ 3·0	27	4	5	0·99	+ 0·46	13·7	+ 1·9	24	+ 3
5. ENGLAND, S.	London	54	33	50·4	40·7	45·6	+ 3·0	31	4	4	1·54	+ 1·02	5·24	− 1·74	9†	− 3†
	Swarraton (Alresford) ℳ	52	30	49·4	39·6	44·5	+ 3·3	28	7	5	0·96	+ 0·26	*	*	*	*
	Dungeness	54	31	50·4	39·6	45·0	+ 1·0	31	7	5	1·06	+ 0·50	11·3	—	19	—
	Hastings (St. Leonards)	54	34	50·2	39·5	44·9	+ 1·1	31	7	4	1·50	+ 0·77	13·1	− 1·7	23	− 3
	Southampton	54	34	51·6	41·7	46·7	+ 3·1	34	1	4	1·04	+ 0·32	11·2	− 1·3	19	− 2
	Portland Bill	53	43	51·3	46·1	48·7	+ 3·5	47	0	5	0·64	—	*	*	*	*
	Shaftesbury ℳ	50	36	48·6	41·8	45·2	+ 4·6	23	1	6	1·30	+ 0·51	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	54	34	46·1	37·4	41·8	− 0·7	11	19	6	4·08	+ 2·08	*	*	*	*
	Glasgow	51	32	44·3	37·4	40·9	− 0·1	6	18	7	1·38	+ 0·49	3·5	− 1·5	7	− 3
	Cally Ꞩ	55	35	50·6	39·7	45·2	+ 4·0	32	6	7	1·84	+ 0·60	*	*	*	*
	Aspatria	52	35	46·1	38·3	42·2	+ 0·9	17	10	6	1·15	—	4·1	—	8	—
	Douglas (Isle of Man)	53	39	49·0	42·3	45·7	+ 2·0	26	0	6	1·86	+ 0·79	10·3	− 2·0	19	− 4
7. ENGLAND, N.W.	Newton Rigg	53	32	46·0	37·2	41·6	+ 2·3	11	20	7	0·98	—	7·8	—	14	—
	Stonyhurst	52	36	46·7	39·3	43·0	+ 1·7	18	8	7	1·70	+ 0·65	7·4	− 1·1	14	− 2
	Blackpool ℳ	53	37	49·1	41·8	45·5	+ 3·3	25	1	6	1·62	+ 0·87	3·0	− 5·5	6	− 10
	Manchester (Prestwich)	54	36	47·8	39·4	43·6	+ 2·3	22	7	7	1·57	+ 0·77	2·6	—	5	—
	Liverpool Obsy. (Bidston)	56	40	48·6	43·3	46·0	+ 3·3	28	0	6	1·29	+ 0·66	8·3	—	15	—
	Chester (Hawarden Bridge)	57	37	49·8	41·2	45·5	+ 2·2	28	2	6	1·34	—	*	*	*	*
	Llandudno ℳ	55	42	50·0	44.2	47·1	+ 2·5	36	0	6	1·58	+ 0·82	6·8	− 3·6	12	− 7
	Holyhead	53	42	50·0	44.0	47·0	+ 1·6	35	0	3	0·98	+ 0·05	*	*	*	*
	Bettws-y-Coed	53	38	49·6	41·9	45·8	+ 1·4	27	0	7	1·77	—	1·7	—	3	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	54	44	51·4	46·6	49·0	+ 2·7	49	0	5	0·75	− 0·16	8·7	− 3·9	15	− 7
	Clifton	54	39	50·7	43·5	47·1	+ 4·6	36	0	4	0·72	− 0·04	*	*	*	*
	Bath	54	34	51·1	42·4	46·8	+ 3·8	34	0	5	1·35	+ 0·67	5·7	—	10	—
	Arlington (N. Devon)	51	39	48·9	43·3	46·1	+ 3·4	29	0	7	2·97	+ 1·60	*	*	*	*
	Cullompton ℳ	54	32	51·0	42·9	47·0	+ 4·7	35	0	7	1·36	+ 0·51	8·5	− 2·2	15	− 4
	Falmouth	54	44	51·5	46·3	48·9	+ 2·2	48	0	6	2·29	+ 1·05	9·6	− 5·2	16	− 9
	Plymouth	54	42	51·5	45·0	48·3	+ 2·9	44	0	6	1·21	+ 0·34	10·0	− 3·3	17	− 6
9. IRELAND, N.	Malin Head	52	38	47·3	42·4	44·9	+ 1·2	20	0	7	1·76	+ 1·02	*	*	*	*
	Edenfel (Omagh)	52	35	46·4	39·9	43·2	+ 2·8	17	6	7	1·57	+ 0·73	*	*	*	*
	Blacksod Point	55	43	50·3	45·1	47·7	+ 3·0	40	0	7	1·16	− 0·11	*	*	*	*
	Markree Castle	54	38	49·0	42·2	45·6	+ 3·8	25	0	7	1·91	+ 0·97	5·9	− 5·4	11	− 10
	Armagh	53	36	48·5	39·1	43·8	+ 2·5	25	8	6	1·02	+ 0·35	5·9	− 4·8	11	− 9
	Donaghadee	53	33	47·3	39·4	43·4	+ 0·1	21	7	6	1·05	+ 0·35	*	*	*	*
10. IRELAND, S.	Dublin	55	38	50·4	41·5	46·0	+ 1·8	30	1	5	1·09	+ 0·51	10·7	− 4·1	19	− 7
	Birr Castle	54	32	49·3	39·4	44·4	+ 2·4	28	7	6	1·14	+ 0·47	6·4	− 6·7	11	− 12
	Kilkenny	55	37	49·1	41·9	45·5	+ 2·5	25	0	5	0·55	− 0·14	*	*	*	*
	Waterford	54	36	50·9	41·9	46·4	+ 3·0	31	0	4	0·56	− 0·40	*	*	*	*
	Roche's Point	54	41	50·9	44·9	47·9	+ 1·9	41	0	6	0·57	− 0·57	*	*	*	*
	Valencia	55	40	51·6	45·6	48·6	+ 2·0	46	0	7	1·23	− 0·07	4·3	− 9·2	8	− 16
	Killarney	57	38	52·6	44·3	48·5	+ 3·8	46	0	6	0·48	− 1·06	*	*	*	*
	Foynes	54	39	49·8	43·9	46·9	+ 3·0	34	0	6	0·77	− 0·23	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	44	53·6	47·1	50·4	+ 1·7	59	0	6	1·16	+ 0·29	10·0	− 5·7	17	− 10
	Jersey	57	44	53·7	47·3	50·5	+ 3·5	60	0	7	1·45	+ 0·52	8·5	− 7·6	14	− 13

Stations Marked ℳ are in connection with the Royal Meteorological Society, and those marked Ꞩ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

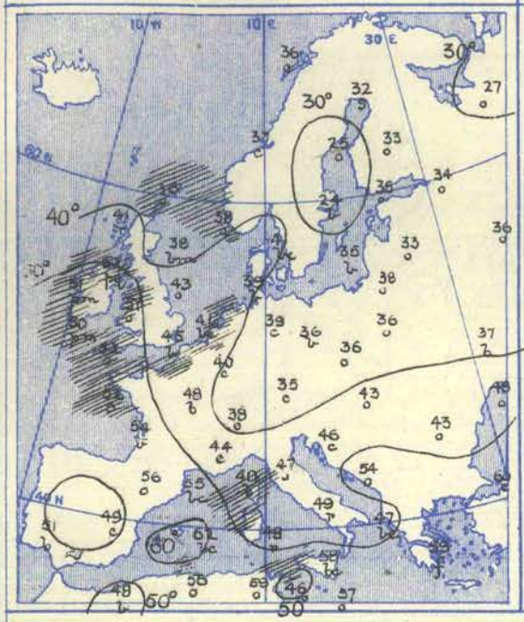
‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 22nd November, 1903.

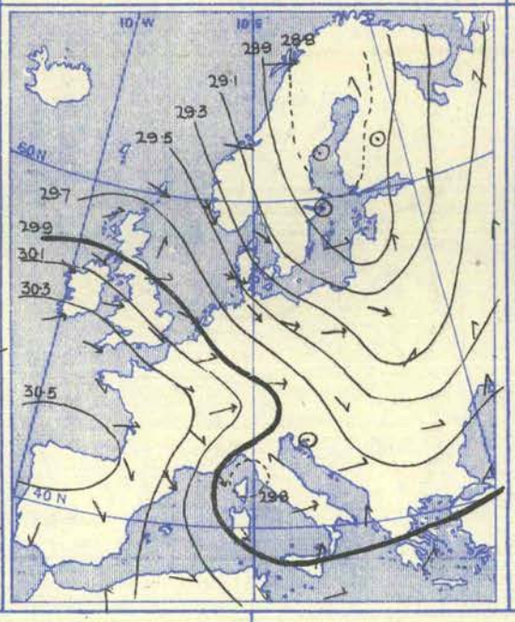
Temperature and Weather.

8 a.m.

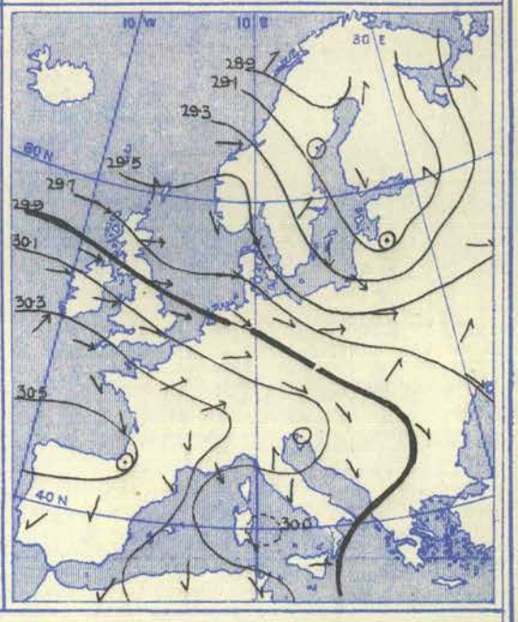


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning in a changeable and unstable condition generally, but fine and bright in Portugal and in some other southern regions. Showery or rainy in many parts of northern and north-western Europe, sleet falling at Wick and snow at Haparanda. Small amounts of rain experienced in most northern and a few southern localities later.

Temperature changed irregularly. Morning readings highest, 62° at Palma, 60° at Constantinople, 59° at La Calle and Athens, 55° at Biarritz, and 54° at Lorient. Lowest (1) 23° at Karlstad, 24° at Stockholm, (2) 27° at Archangel, (3) 35° at Munich, (4) 36° at Wick and Sumburgh Head. Maxima during day as high as 56° at Jersey and above 60° at most stations in the extreme south of Europe, but only 56° at Naples and 52° at Brindisi. Thermometer not rising to 40° over the more northern parts of our area, and only touching 37° at Cracow.

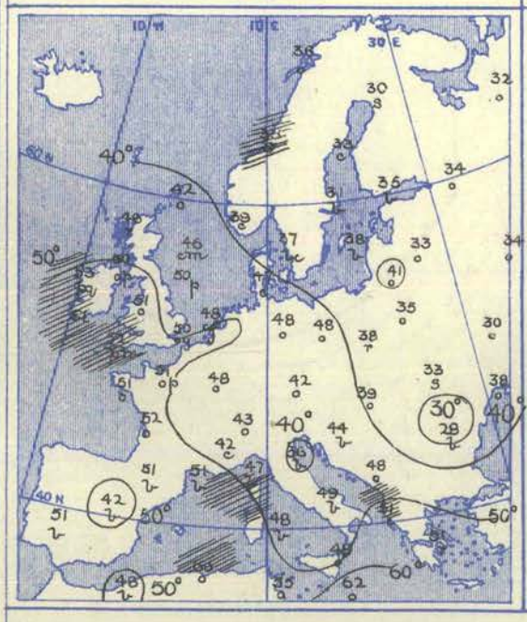
Wind at 8 a.m. circulating cyclonically around the Gulf of Bothnia, and also around the Gulf of Genoa; North-Westerly to Westerly current strong to a gale over our Islands and on the eastern and southern shores of the North Sea, and also on the south coast of France. No great change in direction during day, but a gradual decrease in force taking place very generally.

Barometer risen in the western and fallen in the eastern half of Europe. Morning readings, highest, 30·5 ins. and upwards in an anticyclone over the Bay of Biscay, and lowest, 28·8 ins. in a large depression over the Gulf of Bothnia and its vicinity. No higher than 29·8 ins. in a small disturbance over the Gulf of Genoa. Gradients steep generally over the northern half of our area as well as over the south of France. Disturbances becoming less deep later and gradients decreasing somewhat.

Monday, 23rd November, 1903.

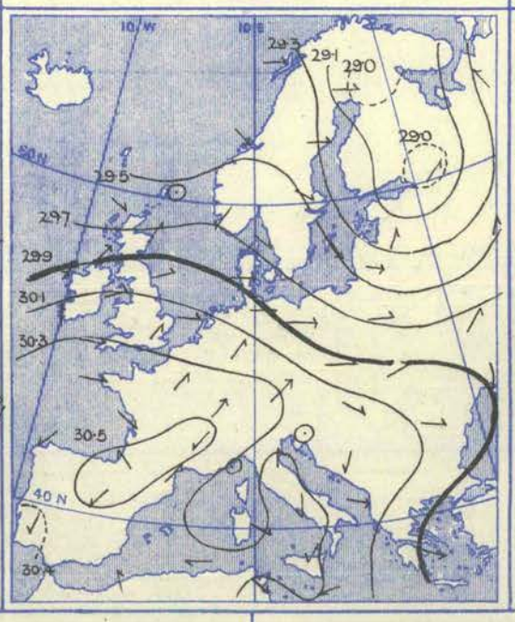
Temperature and Weather.

8 a.m.

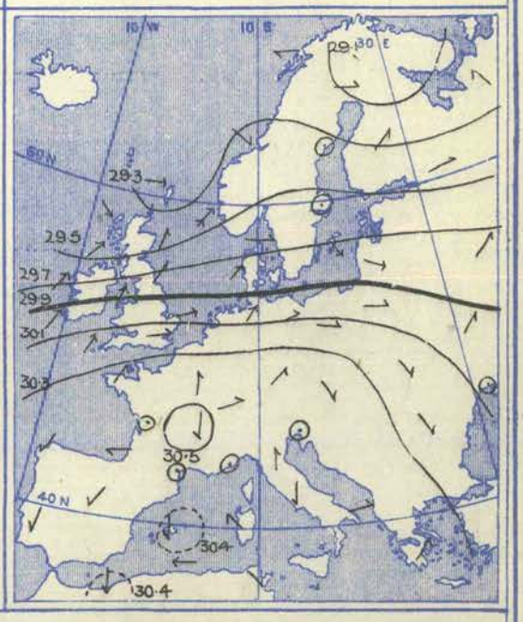


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine in most of the southern countries and also in the south of Sweden; cloudy or dull elsewhere. Rainy in many of our own western and northern districts as well as at Vienna and Athens. Snow falling at Christiansund, Haparanda, and St. Petersburg. Remaining fine in the south, but rain experienced later in various parts of the more northern and central regions.

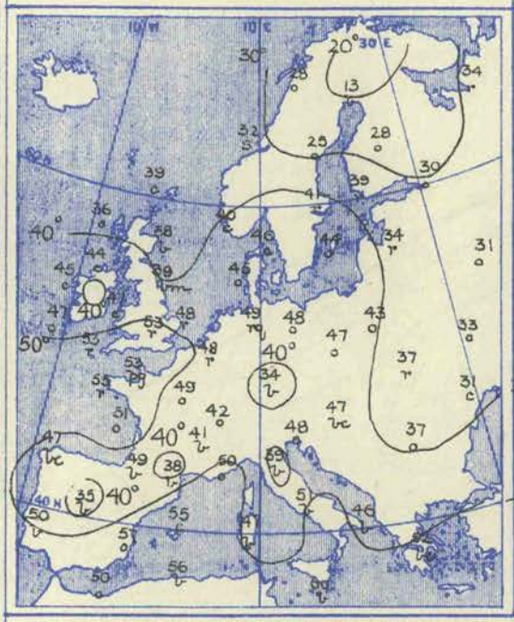
Temperature fallen in the south-east, changed little or risen in most other districts. Morning readings highest, 62° at Malta, 58° at Oporto, and 53° at Blacksod Point. Lowest, (1) 27° at Karlstad, and below 35° at nearly all Scandinavian and Russian stations, (2) 29° at Hermanstadt, (3) 36° at Florence and Turin, (4) 42° at Madrid. Rising later to 56° at North Shields and Liverpool, to above 60° in the more southern regions generally, and to 73° at Alicante.

Wind at 8 a.m. showing complete or partial circulations over the north of Europe and also over the Mediterranean. Light anticyclonic airs prevailing over the Bay of Biscay and France, and moderate to strong Westerly to South-Westerly winds over the United Kingdom. A fresh South-West gale blowing at Blacksod Point. Wind increasing to a moderate to strong gale on most of our western and northern coasts during day or in the night.

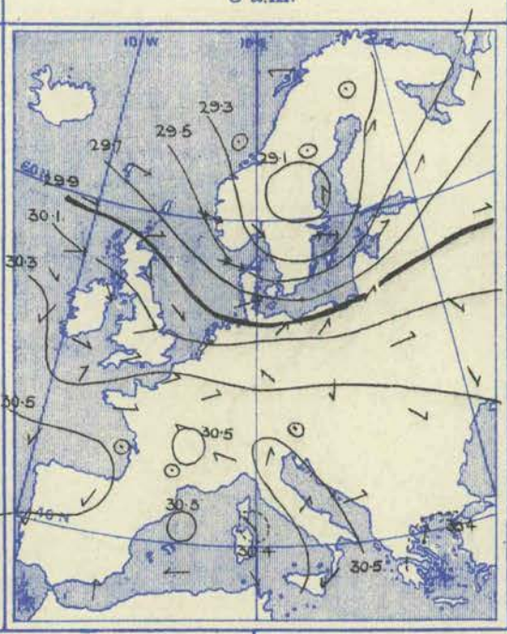
Barometer risen except in Ireland and Scotland. Morning readings ranging from 30·5 ins. in a high pressure area extending from central Spain to central France to below 29·0 ins. in a complex disturbance over Finland and Lapland. Other depressions advancing to our north and west coasts; one travelling eastwards to Scandinavia during the night and the other passing rapidly eastwards across our Islands. Complex disturbance in north apparently moving away northwards.

Tuesday, 24th November, 1903.

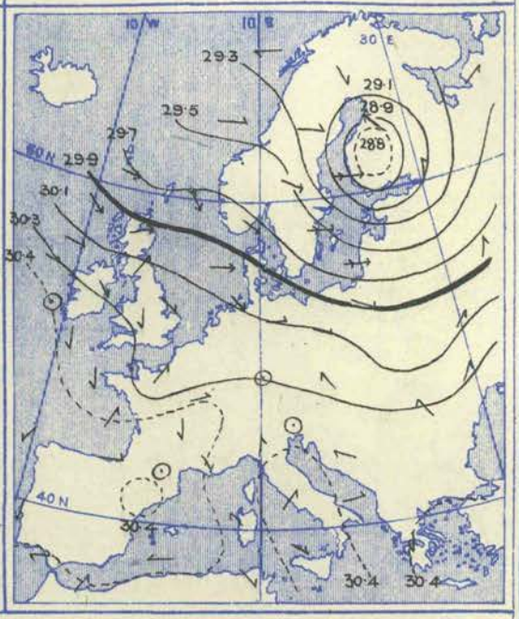
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in all the southern countries and in many British and Irish localities. Cloudy or dull elsewhere, with snow in the west of Norway, rain over the Baltic and at the mouth of the Elbe, and rain or passing showers at our own southern stations, in the north of France, and at Brussels. Rain falling in most of the northern and central parts of Europe during the ensuing twenty-four hours—heaviest amount, 0·6 in. at Besançon.

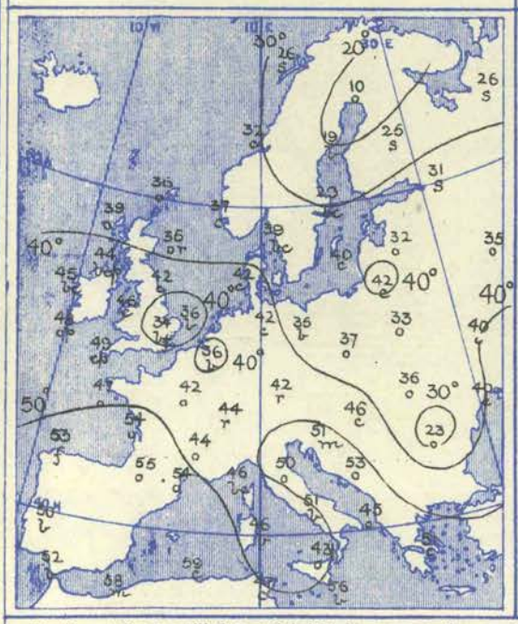
Temperature fallen in the north-western and northern regions and also in the Spanish Peninsula and the south-west of France; risen in most other places. Readings in morning highest, 61° at Sfax, 60° at Malta, 55° at Palma, and 53° in London. Lowest, (1) 13° at Haparanda, 21° at Hernösand, and below 35° over the northern half of Scandinavia and the whole of Russia, (2) 34° at Munich, (3) 35° at Wick and 36° at Parsonstown, (4) 35° at Madrid, and 38° at Perpignan and Rome. No higher than 49° at Patras and 50° at Tunis. Rising later to 57° at Jersey, to above 60° at some stations in the extreme south, and to 70° at La Calle. Frost over England at night.

Wind at 8 a.m. circulating cyclonically around central Scandinavia; North-Westerly current fresh to strong on many of our own coasts, and that from West strong to a gale over south Norway, Denmark, Germany, and the Baltic. Light and anticyclonic in most southern and Mediterranean districts. Cyclonic movement being transferred further east during day, but very little change as a whole.

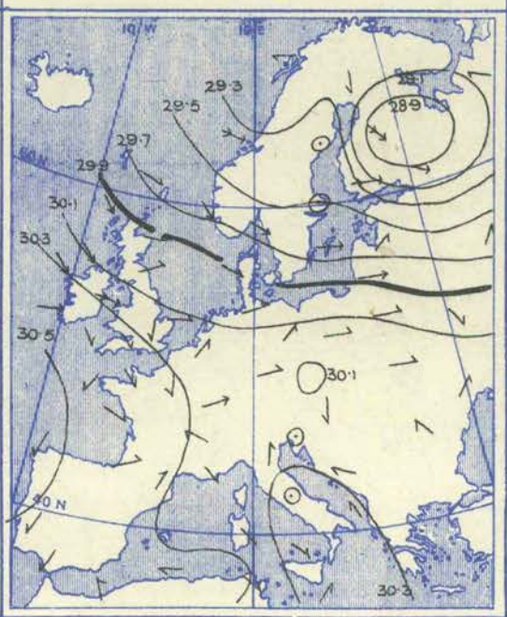
Barometer at 8 a.m. ranging from 30·5 ins. and above over Spain and Portugal, Italy, and in some other southern districts, to less than 29·1 ins. in a large depression over central Scandinavia. Gradients steep over the Baltic and Germany. Depression moving eastwards later and increasing considerably in depth. Gradients growing very steep over the Gulf of Bothnia and northern Europe generally. A secondary disturbance travelling from the south-west of England to central France. Pressure giving way slightly in the far south.

Wednesday, 25th November, 1903.

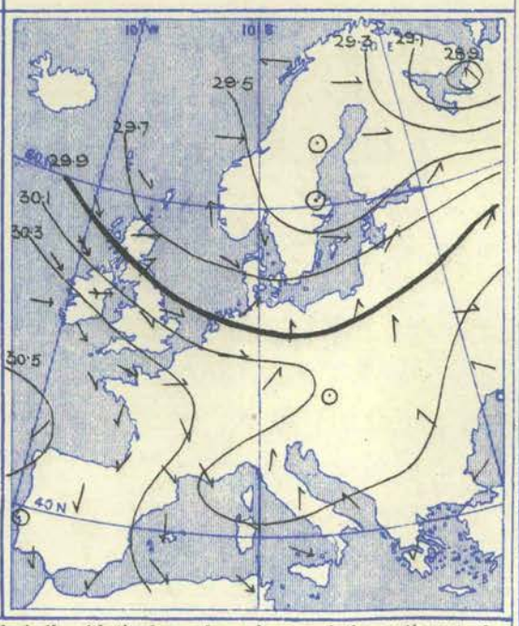
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. still fine and bright in many southern regions and at some of our own stations, but showery on our north-west coasts and at Scilly. Rain falling at Bilboa and at several stations in central Europe and at some in Norway, Finland, and northern Russia. Rain experienced later in most parts of our area, and a considerable quantity of snow in Scotland. Latter yielding 0·6 in. of water in gauge at Wick. A thunderstorm occurring at Cuxhaven.

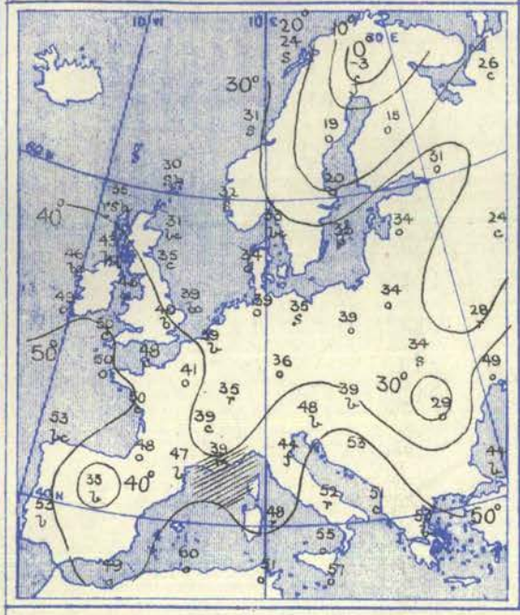
Temperature fallen generally. Readings in morning highest, 59° at Algiers, 56° at Malta, and 55° at Biarritz. Lowest, (1) 10° at Haparanda, 26° at Archangel, and below 32° over the northern portion of Russia and at most stations in Scandinavia, (2) 33° at Warsaw, (3) 33° at Wick, 34° in London, (4) 38° at Turin. Rising subsequently to 47° in London, 48° at Paris, to above 53° in the south generally, and to above 60° in places. Highest value, 68° at Malta and Tunis. Severe frost continuing all day in extreme north, and sharp frost at night in Scotland.

Wind at 8 a.m. circulating cyclonically with the force of a gale around the north-west of Russia. Strong to a moderate gale from North-West or West in the United Kingdom, and light and variable over the Mediterranean and its vicinity. Decreasing greatly in force over the north of Europe during day, but continuing strong and even increasing over our Islands.

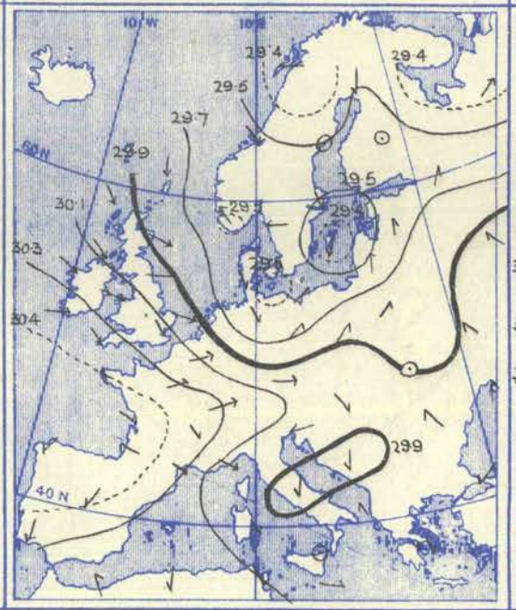
Barometer at 8 a.m. ranging from 30·5 ins. in Portugal and 30·3 ins. and upwards in the south of Italy, to about 28·8 ins. in a large and deep depression lying over the north-west of Russia. Depression travelling away north-eastwards later and gradients becoming much less steep, except over the British Islands and the south-east of France. Barometer falling decidedly in the Gulf of Genoa and the north of Italy, and steadily in the United Kingdom.

Thursday, 26th November, 1903.

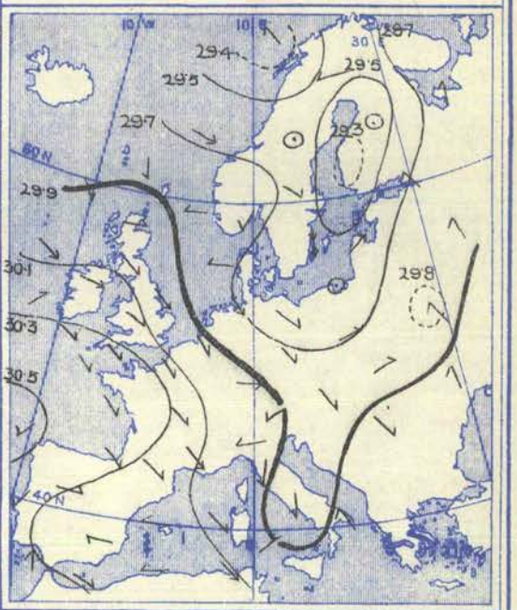
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather varying greatly; fine and bright in a few localities, but cloudy or overcast generally. Rain falling at Belfort, Naples, Palermo, Aumale, and Nottingham, and snow in the Hebrides, Shetlands, in Norway, and at Berlin and Lemberg. Rain, sleet, or snow experienced later over all the northern and central regions, and some rain at a few southern stations, as much as 0·55 in. at Naples.

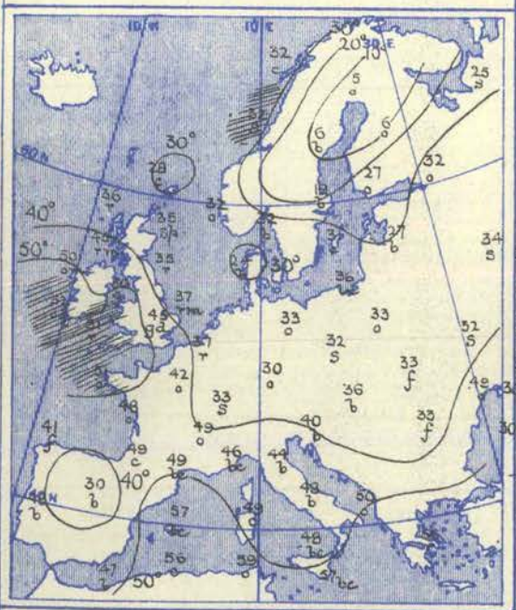
Temperature fallen except over the south of England. Morning readings highest, 60° at Algiers, 57° at Malta, and 53° at Lésina and Corunna. Lowest, (1) −3° at Haparanda, +20° at Stockholm, 24° at Moscow, 28° at Kiev, and 29° at Hermanstadt, (2) 31° at Aberdeen, 32° at Nairn, (3) 33° at Madrid. Scarcely exceeding the freezing point all day in some parts of Scotland, but rising to 50° or above on our south-west and south coasts and over France, and touching or exceeding 60° in the far south of Europe, and in Algeria.

Wind at 8 a.m. light to moderate and anticyclonic over the most south-western portion of our area, but complete or partial cyclonic movements prevailing elsewhere; moderate to strong in most countries, and fresh or strong to a gale over the United Kingdom. No important change later.

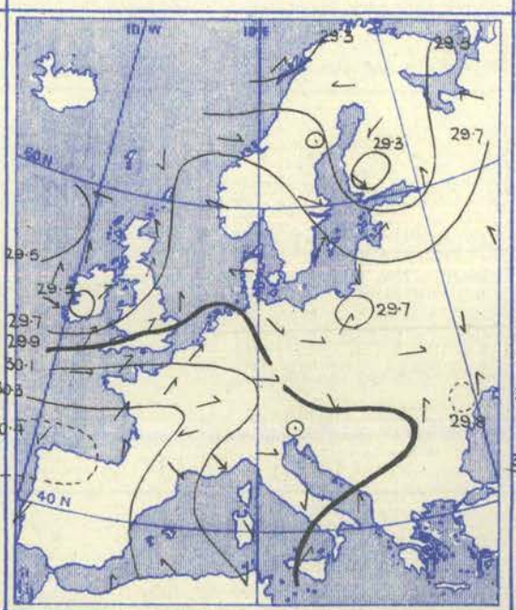
Barometer in morning ranging from above 30·4 ins. in an anticyclone extending from the Atlantic to the west of France to 29·9 ins. in a depression over Italy and its neighbourhood to 29·5 ins. in a small minimum near Skudesnaes and to about 29·3 ins. in three other centres lying respectively near Gothland, over the north of Norway, and the White Sea. Considerable modification taking place later in the shape of the various disturbances, and a decided baric fall setting in in the west of Ireland.

Friday, 27th November, 1903.

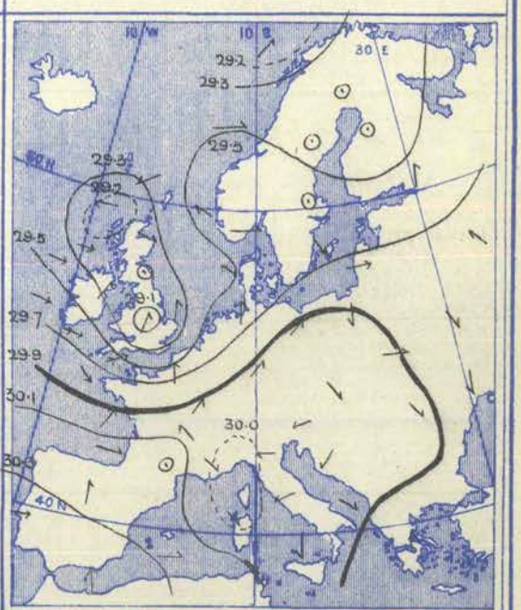
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in Italy, the south of France, Spain, Portugal, and the west of Algeria, as well as at some stations on the shores of the Baltic. Cloudy or overcast elsewhere, with rain or sleet in many parts of the United Kingdom, snow at Christiansund, Breslau, Belfort, and in several Russian districts, and rain in Greece. Large quantities of rain experienced later in nearly all the northern and north-western countries, as well as in Greece. Largest amounts, 1·9 in. at Dunkirk, 1·5 in. at Cape Griz Nez, 1·1 in. in London, and 1·0 in. at Bath.

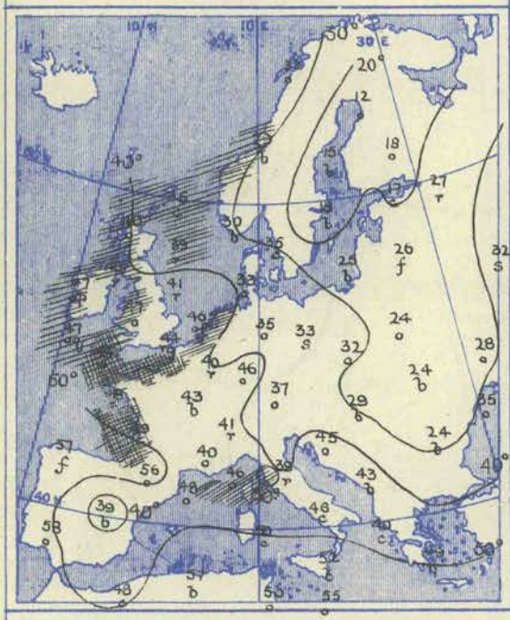
Temperature fallen in most localities, but risen in the far north of Scandinavia and at most of our own stations. Morning readings highest, 59° at La Calle, 57° at Malta and Palma, and 56° at Athens. Lowest, (1) 5° at Haparanda, 6° at Hernösand and Kuopio, and 15° at Karlstad, (2) 28° at Sumburgh Head and 32° at Nairn, (3) 30° at Madrid, (4) 30° at Munich. Exceeding 50° at many of our own stations later, and touching or exceeding 60° in the far south. Highest value, 66° at Algiers. Severe frost continuing in extreme north.

Wind in morning light and anticyclonic over the Spanish Peninsula and the south-west of France; cyclonic elsewhere and moderate to fresh or strong in force. Complete circulations shown over northern Europe and the south of Ireland. Wind increasing to a fresh or strong gale later over the greater part both of our Islands and France, and a cyclonic movement of moderate to fresh or strong winds appearing over the Gulf of Genoa and its vicinity.

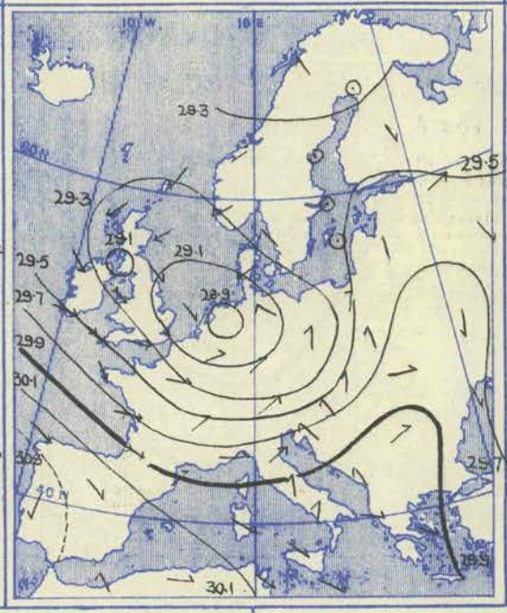
Barometer at 8 a.m. ranging from 30·4 ins. over the north of Spain to 29·7 ins. and less in a depression over east Prussia, below 29·5 ins. in two other systems lying respectively over the south of Ireland and off the west of Scotland, and to below 29·3 ins. in two other minima, one over Finland and the other in the north of Norway and Lapland. Irish depression travelling quickly eastwards later, and increasing considerably in depth, and gradients becoming very steep over the English Channel, France, and the south and south-west of England.

Saturday, 28th November, 1903.

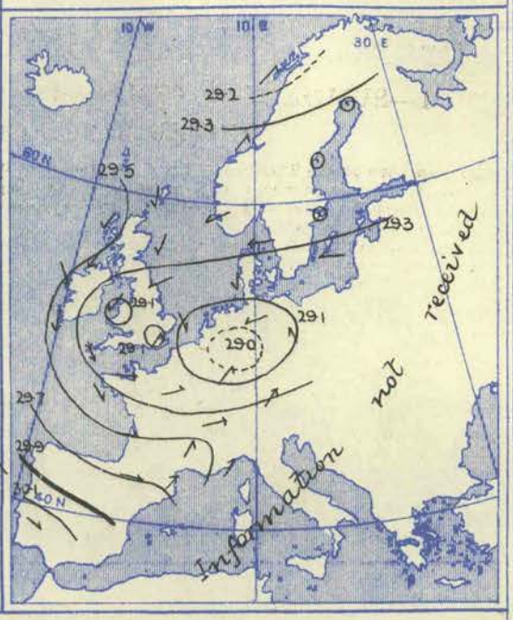
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather at 8 a.m. fine and bright in the east of Sweden, the west of Norway, and in some of the most southern parts of our area; cloudy or overcast over Europe as a whole, with snow at Moscow, Swinemünde, and Berlin, and rain over the United Kingdom, France, and the Netherlands. Rain falling in all the western countries later; heaviest amounts, 0·7 in. at Biarritz, 0·5 in. at Cape Gris Nez and Parsonstown, and 0·4 in. at Brussels and in London.

Temperature fallen as a whole. Morning readings highest, 58° at Lisbon, 57° at Algiers and Corunna, and 55° at Malta and Leghorn. Lowest, (1) 12° at Haparanda, 13° at Karlstad, (2) 24° at Lemberg and Warsaw, (3) 35° in the Shetlands, 38° at Wick, (4) 39° at Madrid. Temperature remaining below 40° in the extreme north of Scotland, and below 50° at nearly all our stations, but exceeding it in the south and west of France, and reaching 63° at Lisbon. Maxima about 20° in the north of Sweden.

Wind at 8 a.m. showing two complete cyclonic circulations and one partial circulation, the two former being over our Islands and the adjacent portions of the Continent, and the latter in the north of Scandinavia. The North-Easterly and Northerly current strong to a moderate gale on our northern coasts, and that from North-West or West strong to a fresh or strong gale on our western and southern coasts. Easterly wind blowing strongly over Denmark, the Netherlands, and north Germany. Very little change over western Europe later.

Barometer at 8 a.m. ranging from above 30·3 ins. over and to the west of Portugal to below 29·1 ins. in a depression over the north-west of Norway, to less than 29·1 ins. in another system centred over the North Channel, and to below 28·9 ins. in a third lying over the Netherlands. Gradients steep generally, except in the extreme north and south-east of our area. Dutch depression moving eastwards during day, and that over the North Channel travelling southwards to Wales. Pressure giving way somewhat over Portugal, and gradients becoming rather less steep on our southern coasts.

IV.—GENERAL NOTES, etc.

The cyclonic systems of this period were mostly confined to the northern parts of our area except during the early days, when there were some of considerable importance over the Mediterranean, and at the end of the week, when a well-marked depression of increasing intensity travelled eastwards from the south of Ireland to Holland, and another system moved southwards from the west of Scotland to the south-west of England. Some of the disturbances in northern Europe were both large and deep and were accompanied by very strong winds or gales in their neighbourhood, while those shown later over our Islands caused moderate to strong gales over the major portion of France and on all our own coasts. The highest pressure, which was at first situated over Spain and Portugal, subsequently extended eastwards to the Mediterranean. Temperature was subject to frequent and considerable fluctuations, but was a good deal lower, as a whole, than that of the preceding week. The daily maxima were not generally much above 60° even in the extreme south, and very rarely as high as 70°. In the north of Russia and Scandinavia severe frost was nearly continuous throughout the period, and occasional night frosts were recorded in the United Kingdom. Rain fell in rather large amounts in many of the more northern regions, and snow or sleet were also experienced. In the north of Scotland some parts of Germany, Scandinavia, and Finland the snow was rather heavy. Over the Iberian Peninsula the weather was mostly fine and dry, and similar conditions prevailed in most other countries in the far south. Towards the end of the period, however, a considerable quantity of rain was recorded in Greece.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 278.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	2·9	- 4·6	6	- 10
STRATHPEFFER SPA	3·9	- 4·5	8	- 9
EDINBURGH	7·5	- 1·0	14	- 2
COCKLE PARK	17·7	—	33	—
NEWCASTLE-ON-TYNE	10·5	—	20	—
YORK	10·9	+ 3·4	20	+ 6
CROMER	9·8	—	18	—
LOWESTOFT	8·8	—	15	—
DUNMOW	12·6	—	22	—
SHEFFIELD	12·8	—	23	—
WORKSOP	12·4	+ 3·2	22	+ 6
THURCASTON	10·6	+ 0·8	19	+ 1
TUNBRIDGE WELLS	10·1	—	17	—
MARGATE	5·1	- 7·6	9	- 13
BROADSTAIRS	7·6	—	13	—
RAMSGATE	—	—	—	—
EASTBOURNE	15·3	+ 2·0	27	+ 4
BRIGHTON	13·8	- 0·1	24	0
WORTHING	12·9	—	22	—
BOGNOR	12·5†	—	22†	—
WATERGATE PARK	11·0	—	19	—
WESTBOURNE	10·8†	- 1·8	19†	- 3
VENTNOR HOSPITAL	11·8	- 1·4	20	- 2
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	7·1	- 2·6	12	- 5
SOUTHPORT	4·3	—	8	—
RHYL	8·1	—	15	—
ABERDOVEY	7·7†	—	14†	—
TENBY	9·9	- 2·8	17	- 5
TORQUAY	15·1	+ 1·7	26	+ 3
NEWQUAY	4·8	- 10·5	8	- 18
GUERNSEY	7·9†	- 4·7	13†	- 8

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending October 17th, 1903.	Lairg	58	34	50·9	40·1	45·3	+ 0·8	31	5	7	1·77	+ 0·91	—	—	—	—
" " 24th, "	Lairg	—	—	—	—	—	—	—	—	?5	0·72	- 0·15	—	—	—	—
" " " "	Tenby	—	—	—	—	—	—	—	—	—	—	—	16·4	- 6·4	23	- 9
" " 31st, "	Tenby	—	—	—	—	—	—	—	—	—	—	—	13·7	- 6·6	20	- 10
" " November 7th, "	Tenby	—	—	—	—	—	—	—	—	—	—	—	37·3	+19·6	57	+ 27

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 48.] *Third Series.* WEEK ENDING SATURDAY, DECEMBER 5TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 284.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	49	15	37·9	27·2	32·8	7 below	0	−13	64	+39	1891	−106	633	− 49
	1. SCOTLAND, EAST	48	14	37·9	27·2	32·8	6 below	0	−13	64	+33	2140	−207	670	− 89
	2. ENGLAND, N.E.	45	22	39·7	29·8	34·9	6 below	0	−14	50	+26	2555	− 13	447	−146
	3. ENGLAND, EAST	49	23	40·2	31·2	35·9	5 below	0	−17	43	+16	3074	+ 96	414	−236
	4. MIDLAND COUNTIES	45	21	38·2	29·9	34·2	6 below	0	−17	55	+27	2815	−108	472	−208
	5. ENGLAND, SOUTH	50	18	41·2	31·5	36·5	6 below	0	−24	39	+20	3269	− 25	278	−191
Principal Grazing Districts.	6. SCOTLAND, WEST	51	20	40·3	29·2	35·0	6 below	0	−18	49	+31	2466	− 51	413	−100
	7. ENGLAND, N.W.	52	20	40·6	30·8	35·9	6 below	0	−19	43	+25	2755	− 10	341	−127
	8. ENGLAND, S.W.	52	21	42·0	30·5	37·2	6 below	0	−28	34	+21	3185	+ 85	210	−146
	9. IRELAND, NORTH	51	13	41·1	31·0	36·2	6 below	0	−20	41	+24	2555	−107	356	− 83
	10. IRELAND, SOUTH	53	19	43·8	31·1	37·7	7 below	5	−24	41	+28	3057	+ 9	257	− 63
	— CHANNEL ISLANDS	51	29	46·2	38·3	42·4	5 below	18	−24	10	+ 7	3767	+105	59	− 68

Rainfall.

Bright Sunshine.

	DISTRICTS. (See p. 284.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	16	3 more	244	+36	64·3	+19·1	8	+ 2	17	+ 4	1017	− 83	24	− 2
	1. SCOTLAND, EAST	3	4	3 less	215	+35	37·4	+ 8·6	6	− 3	11	− 7	1160	−108	28	− 3
	2. ENGLAND, N.E.	4	11	5 more	183	+17	30·1	+ 6·6	7	− 2	13	− 4	1265	− 81	30	− 2
	3. ENGLAND, EAST	4	3	2 less	166	0	28·7	+ 6·2	9	− 3	17	− 6	1428	−117	34	− 3
	4. MIDLAND COUNTIES	2	2	4 less	178	+18	33·4	+ 7·9	8	0	15	0	1250	− 82	30	− 2
	5. ENGLAND, SOUTH	3	5	1 less	182	+26	34·0	+ 8·0	11	− 2	19	− 3	1513	− 43	36	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	3	15	2 more	225	+39	63·3	+17·6	9	+ 4	18	+ 8	1276	− 35	30	− 1
	7. ENGLAND, N.W.	4	11	3 more	212	+26	42·6	+10·7	11	+ 1	20	+ 3	1368	+ 67	33	+ 2
	8. ENGLAND, S.W.	3	6	4 less	203	+24	45·0	+ 9·4	17	+ 7	31	+12	1492	− 97	36	− 2
	9. IRELAND, NORTH	5	9	0 (average)	245	+34	44·5	+11·1	9	− 1	18	− 2	1160	− 73	28	− 2
	10. IRELAND, SOUTH	4	6	5 less	222	+33	44·5	+ 7·5	16	+ 3	29	+ 5	1304	−107	31	− 3
	— CHANNEL ISLANDS	7	12	3 more	221	+38	35·3	+ 5·3	13	− 1	22	− 2	1726	−110	41	− 3

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was cold and mostly of an unsettled character, but very little precipitation was experienced in the southern counties of England. In the extreme west and north-west some rain, sleet or snow fell daily, and similar falls were not infrequent along the eastern and north-eastern parts of Great Britain. At Shields and in its neighbourhood the snow on Monday was very heavy. A thunderstorm occurred in the west of Lancashire on Friday. On Saturday dense fog prevailed in nearly all parts of England.

Temperature was much below the mean, the deficit ranging between 5° in the Channel Islands and England E., and 7° in Scotland N. and Ireland S. The highest of the maxima were registered either on December 3rd or 4th, when they ranged from 45° in England N.E. and the Midland Counties, to 53° in Ireland S. The lowest of the minima were recorded either on Wednesday or Thursday and were very low for the time of year. In Ireland N. the thermometer fell to 13°, in Scotland E. to 14°, and in Scotland N. to 15°, while elsewhere the readings ranged from 18° in England S., 19° in Ireland S., and 21° in England S.W. and the Midland Counties, to 29° in the Channel Islands.

Rainfall was less than the mean generally, but just equal to it in Ireland N., and in excess in Scotland N. and England N.W. and N.E., as well as in the Channel Islands.

Bright Sunshine was fairly prevalent for the season over the Kingdom as a whole, but was deficient over the east and south of Great Britain and also in the north of Ireland. The percentage of the possible duration ranged from 31 in England S.W. and 29 in Ireland N., to 11 in Scotland E.

Barometer and Wind.—At the commencement of the week a small, well-marked depression which had moved southwards lay near Scilly, while the barometer was highest off the west of Ireland, and the winds over our Islands consequently Northerly or North-Easterly. The highest pressure continued to be found off our western coasts, and the wind to blow from some Northerly point until Wednesday, when the centre of a large and deep disturbance appeared off our northern coasts, the highest pressure became transferred to France and Spain, and the wind backed to the South-Westward, and blew strongly generally with the force of a gale in many places. By the end of the week a shallow but very large depression of a "V"-shaped character stretched from the south-western parts of France across our Islands and to beyond the north of Scotland. This system caused the winds to fall very light and to become variable in direction, and in some localities to die out entirely.

2072*r*. Wy. & S. Ltd.
370 12 | 03

II.—DATA from which the SUMMARY on page 283 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
C. SCOTLAND, N.	Sumburgh Head	43	27	39·3	31·6	35·6	− 5·3	0	45	6	0·77	− 0·22	*	*	*	*
	Stornoway	44	26	39·1	29·6	34·5	− 6·2	0	53	6	1·06	− 0·21	6·7	− 0·5	15	− 1
	Wick	45	20	39·6	27·3	33·7	− 6·1	0	58	5	0·90	+ 0·20	*	*	*	*
	Lairg Ⓢ	41	15	35·3	22·5	29·2	− 7·5	0	90	2	1·11	+ 0·25	*	*	*	*
	Glencarron Ⓢ	48	18	36·1	25·1	30·8	− 7·9	0	78	7	3·02	+ 0·76	*	*	*	*
	Fort Augustus Ⓢ	47	18	37·4	25·6	31·7	− 8·1	0	72	6	1·97	+ 0·83	0·0	− 3·0	0	− 6
	Fort William	49	23	38·8	28·8	34·0	− 7·0	0	56	4	2·38	+ 0·32	9·1	+ 4·8	19	+ 10
1. SCOTLAND, E.	Nairn	46	24	38·4	28·1	33·5	− 5·5	0	60	5	0·53	+ 0·03	*	*	*	*
	Aberdeen	44	23	35·9	27·1	31·7	− 8·0	0	72	4	0·45	− 0·28	7·8	− 2·5	16	− 5
	Braemar Ⓢ	43	14	35·6	22·7	29·4	− 7·1	0	88	2	0·13	− 0·67	*	*	*	*
	Ochtertyre Ⓢ	48	24	38·9	27·0	33·2	− 5·7	0	62	3	0·39	− 0·60	*	*	*	*
	Leith Ⓢ	48	27	40·0	29·9	35·2	− 5·9	0	48	2	0·25	− 0·20	*	*	*	*
	Marchmont Ⓢ	45	22	38·6	28·4	33·7	− 4·8	0	58	2	0·63	− 0·11	5·5	− 3·6	11	− 7
2. ENGLAND, N.E.	Alnwick Castle	45	22	38·9	27·8	33·6	− 6·6	0	59	5	2·04	+ 1·31	*	*	*	*
	Durham	45	24	37·6	28·3	33·1	− 6·5	0	62	4	1·19	+ 0·60	6·3	− 4·3	12	− 8
	Shields	45	26	40·3	29·9	35·3	− 5·6	0	47	4	1·51	+ 0·97	*	*	*	*
	Scarborough Ⓜ	45	25	41·4	30·4	36·1	− 5·2	0	41	5	0·98	+ 0·35	5·8	—	11	—
	Spurn Head	43	30	40·3	32·0	36·3	− 5·3	0	40	4	0·66	+ 0·19	*	*	*	*
	Fulbeck (Lincolnshire)	—	27	—	31·1	—	—	—	—	3	0·14	− 0·31	8·4	—	16	—
3. ENGLAND, E.	Hillington Ⓜ	43	23	38·6	27·7	33·4	− 6·4	0	60	5	0·55	− 0·02	9·8	− 1·0	18	− 2
	Yarmouth	44	28	40·9	33·9	37·5	− 3·6	0	32	5	0·35	− 0·25	*	*	*	*
	Geldeston	45	26	40·9	29·6	35·5	− 5·5	0	46	4	0·21	− 0·34	7·6	− 4·8	14	− 9
	Cambridge	—	25	—	27·9	—	—	—	—	3	0·14	− 0·28	7·4	− 4·0	14	− 7
	Felixstowe	49	28	41·6	33·7	37·8	− 3·8	0	29	4	0·47	—	12·6†	—	23†	—
	Rothamsted	45	26	38·5	29·8	34·3	− 5·9	0	54	5	0·29	− 0·29	8·3	− 3·3	15	− 6
	Shoeburyness	46	26	40·7	32·4	36·7	− 5·0	0	37	2	0·17	− 0·28	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	43	24	36·8	30·0	33·5	− 6·1	0	60	6	0·48	− 0·21	10·1	—	19	—
	Bawtry (Hesley Hall)	43	25	37·0	29·7	33·5	− 6·3	0	60	1	0·06	− 0·41	*	*	*	*
	Nottingham	45	27	39·6	31·1	35·5	− 4·9	0	46	1	0·07	− 0·38	5·2	—	10	—
	Loughborough	45	22	38·8	29·6	34·4	− 6·0	0	53	1	0·17	− 0·37	*	*	*	*
	Colly Weston (Stamford)	44	25	39·0	30·1	34·7	− 5·1	0	51	3	0·15	− 0·37	*	*	*	*
	Cheadle Ⓜ	42	26	37·5	28·7	33·3	− 6·1	0	61	1	0·21	− 0·50	*	*	*	*
	Birmingham (Edgbaston)	44	28	38·1	29·9	34·2	− 6·5	0	55	1	0·08	− 0·46	3·3	—	6	—
	Shrewsbury															
	Hereford Ⓜ	45	23	38·0	29·0	33·7	− 7·3	0	58	1	0·12	− 0·44	*	*	*	*
	Cirencester	45	21	38·1	29·0	33·7	− 6·2	0	58	2	0·34	− 0·32	10·5	− 0·2	19	0
	Oxford	45	28	39·3	31·9	35·8	− 5·1	0	43	1	0·06	− 0·45	8·8	− 2·4	16	− 4
5. ENGLAND, S.	London	46	22	39·9	30·9	35·6	− 6·1	0	45	2	0·15	− 0·35	11·7‡	+ 5·4‡	21‡	+ 10‡
	Swarraton (Alresford) Ⓜ	46	18	39·2	28·3	34·0	− 6·3	0	56	2	0·56	− 0·14	*	*	*	*
	Dungeness	48	23	42·4	33·9	38·3	− 4·7	1	30	7	0·92	+ 0·39	5·8	—	10	—
	Hastings (St. Leonards)	47	30	41·3	32·2	36·9	− 6·0	0	36	5	0·89	+ 0·19	7·5	− 7·0	13	− 13
	Southampton	49	23	42·1	30·1	36·3	− 6·6	0	43	3	0·59	− 0·14	12·7	+ 0·3	23	+ 1
	Portland Bill	50	29	43·0	34·6	39·0	− 4·9	3	28	2	0·45	—	*	*	*	*
	Shaftesbury Ⓜ	46	27	40·4	30·4	35·6	− 4·1	0	45	3	0·22	− 0·54	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	51	24	39·9	27·7	34·0	− 8·1	0	56	4	3·00	+ 0·93	*	*	*	*
	Glasgow	47	26	39·3	30·8	35·2	− 5·2	0	48	4	0·95	+ 0·02	6·3	+ 1·6	13	+ 3
	Cally Ⓢ	49	20	41·1	28·7	35·2	− 5·3	0	48	2	0·90	− 0·30	*	*	*	*
	Aspatria	47	21	39·7	27·8	34·0	− 6·9	0	56	3	1·63	—	3·7	—	7	—
	Douglas (Isle of Man)	49	25	41·7	31·0	36·6	− 6·7	0	38	3	1·09	+ 0·02	17·5	+ 6·3	33	+ 12
7. ENGLAND, N.W.	Newton Rigg	48	20	37·7	25·7	31·9	− 9·0	0	71	3	0·85	—	5·4	—	10	—
	Stonyhurst	43	24	38·1	30·8	34·6	− 5·9	0	52	3	1·61	+ 0·54	8·2	+ 0·5	16	+ 1
	Blackpool Ⓜ	47	23	41·0	28·7	35·1	− 6·4	0	48	4	1·32	+ 0·58	11·7	+ 4·0	22	+ 8
	Manchester (Prestwich)	43	26	38·4	30·3	34·5	− 6·1	0	53	3	0·56	− 0·28	4·7	—	9	—
	Liverpool Obsy. (Bidston)	47	27	40·3	31·7	36·2	− 5·8	0	41	4	0·34	− 0·28	18·4	—	34	—
	Chester (Hawarden Bridge)	50	25	41·2	30·6	36·1	− 6·5	0	41	1	0·02	—	*	*	*	*
	Llandudno Ⓜ	52	28	44·7	35·1	40·1	− 4·0	8	27	6	1·76	+ 1·02	9·1	− 0·5	17	− 1
	Holyhead	50	34	43·6	35·1	39·5	− 5·2	4	26	6	1·71	+ 0·81	*	*	*	*
	Bettws-y-Coed	48	22	40·7	29·6	35·4	− 8·2	0	46	6	1·59	—	9·3	—	17	—
8. ENGLAND, S.W.	Llandovery												*	*	*	*
	Pembroke	52	32	44·1	36·1	40·3	− 5·3	6	24	5	0·52	− 0·41	14·7	+ 2·9	27	+ 5
	Clifton	47	28	40·2	32·3	36·4	− 5·4	0	39	2	0·36	− 0·40	*	*	*	*
	Bath	48	21	40·3	29·7	35·2	− 6·8	0	48	2	0·46	− 0·22	7·8	—	14	—
	Arlington (N. Devon)	47	25	40·6	30·7	35·9	− 6·3	0	43	4	0·66	− 0·74	*	*	*	*
	Cullompton Ⓜ	48	21	41·3	28·7	35·3	− 6·3	0	47	3	0·28	− 0·58	14·5	+ 4·1	26	+ 7
	Falmouth	51	30	43·8	34·3	39·2	− 7·1	5	29	5	1·24	0·00	24·3	+ 10·0	43	+ 18
	Plymouth	51	24	43·8	31·5	37·9	− 6·8	5	40	3	0·50	− 0·40	22·6	+ 9·8	40	+ 17
9. IRELAND, N	Malin Head	48	32	42·3	35·0	38·8	− 4·6	1	26	7	1·04	+ 0·30	*	*	*	*
	Edenfel (Omagh)	49	13	38·4	26·1	32·5	− 7·2	0	67	5	1·16	+ 0·32	*	*	*	*
	Blacksod Point	51	32	44·0	35·7	40·0	− 4·4	6	25	7	1·67	+ 0·35	*	*	*	*
	Markree Castle	50	18	40·6	26·9	34·0	− 7·2	0	56	6	0·84	− 0·10	9·5	− 0·5	18	− 1
	Armagh	48	24	39·9	29·1	34·7	− 6·0	0	51	2	0·34	− 0·33	9·2	− 1·3	17	− 2
	Donaghadee	48	32	41·1	33·1	37·3	− 5·4	0	33	3	0·12	− 0·58	*	*	*	*
10. IRELAND, S.	Dublin	51	27	41·2	31·5	36·5	− 6·9	0	39	3	0·38	− 0·18	17·9	+ 4·0	33	+ 7
	Birr Castle	50	19	40·6	26·4	33·8	− 7·8	0	57	4	0·46	− 0·25	10·3	− 1·9	19	− 4
	Kilkenny												*	*	*	*
	Waterford	51	—	43·0	—	—	—	—	—	0	0·00	− 0·97	*	*	*	*
	Roche's Point	51	30	43·6	33·4	38·7	− 6·9	4	33	5	0·18	− 0·99	*	*	*	*
	Valencia	53	27	45·4	34·1	40·0	− 6·4	10	32	7	1·11	− 0·27	18·6	+ 6·5	34	+ 12
	Killarney	52	23	46·6	29·7	38·5	− 6·1	13	49	4	0·83	− 0·74	*	*	*	*
	Foynes	52	28	45·1	31·7	38·7	− 4·7	9	40	3	1·05	+ 0·03	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	51	36	47·0	39·9	43·6	− 4·9	20	6	6	1·19	+ 0·27	15·5	+ 0·2	27	0
	Jersey	50	29	45·4	36·6	41·2	− 4·9	10	23	7	1·17	+ 0·26	14·6	− 0·8	25	− 1

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

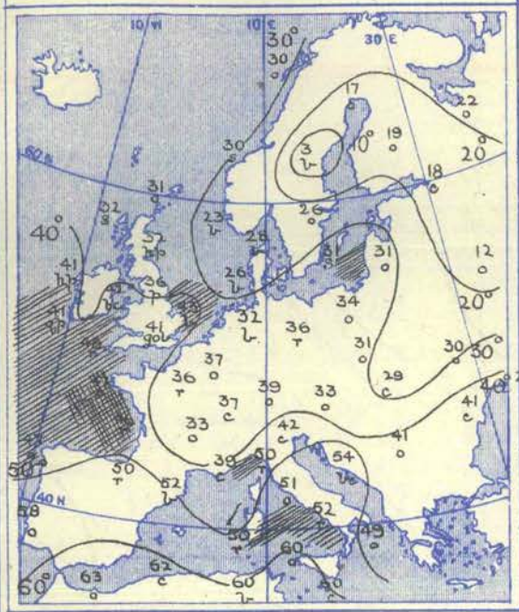
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 29th November, 1903.

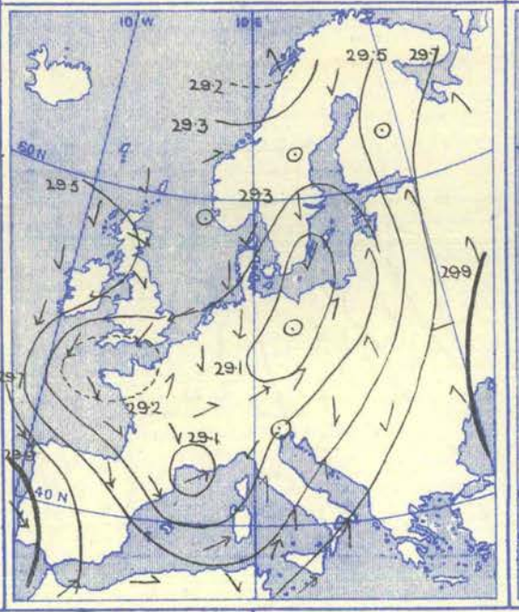
Temperature and Weather. 8 a.m.



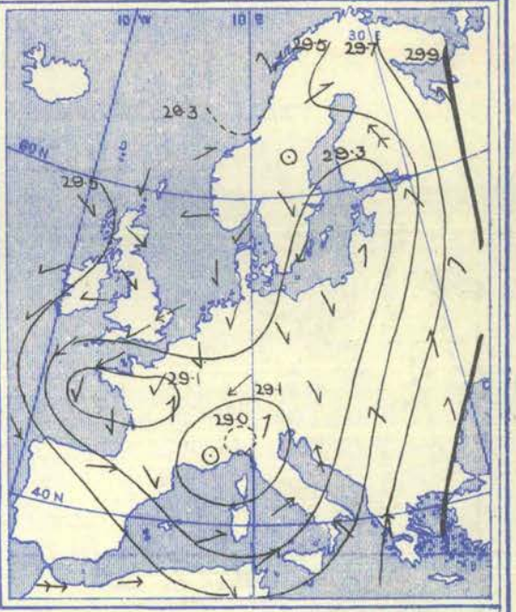
Weather at 8 a.m. dull or very cloudy over the whole of our area. Snow falling in Finland, some parts of Scandinavia, and in the north of Ireland and Scotland, and rain at many stations, both in our Islands and on the Continent. Rain falling in considerable or large quantities in nearly all places later, and snow in the far north—about an inch in northern Italy and in the south-east of France, and as much as 1·9 in. (accompanied by a thunderstorm) at Biarritz.

Temperature fallen generally, but risen in Austria-Hungary, Italy, and Algeria. Morning readings ranging from 63° at Nemours and Oran, 58° at Lisbon, and 54° at Lesina, to below 40° over Europe as a whole, to below 30° over the north-eastern regions generally, and to below 20° in the north of Russia and Sweden. Lowest values, 12° at Moscow and 3° at Hernösand. Low all day in most districts, but exceeding 50° at some French stations, and 60° in Algeria, Greece, and the south of Italy. Highest value, 68° at Palermo, Oran, and La Calle. Severe frost at night over central Irealnd and the north of Great Britain.

Barometer and Wind. 8 a.m.



6 p.m.

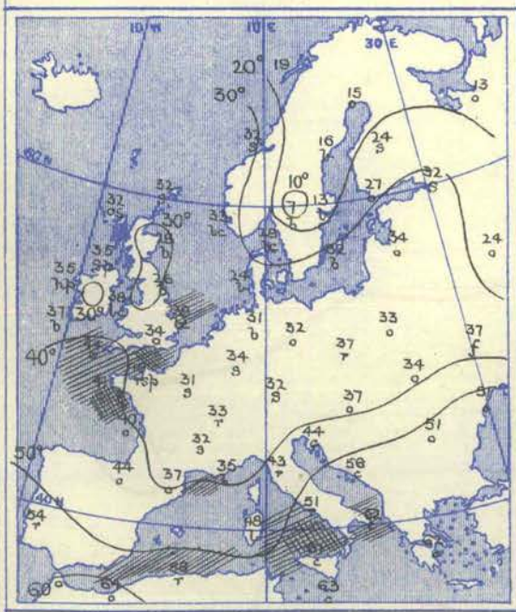


Wind at 8 a.m. showing three complete cyclonic circulations—one around the English Channel, another around the south of France, and a third around Prussia. A partial cyclonic circulation prevailing in the north of Norway. North-Easterly current fresh or strong over England and Ireland, and that from North-West strong to a gale over Spain, the Bay, and the west of France. South-Easterly winds strong in Finland. A moderate Southerly gale reported at Oran and Sfax. Increasing to a moderate or fresh gale from some Southerly point later over Greece, the Adriatic, and Italy, and from the Westward in Algeria.

Barometer at 8 a.m. ranging from above 30·0 ins. in Greece and only a trifle lower in Portugal, to less than 29·2 ins. (1) in a complex depression over the English Channel and its neighbourhood, (2) over the south-east of France, and (3) over the extreme north of Norway, and to less than 29·1 ins. in another system over Prussia and extending to Gothland. Depressions travelling south-eastwards or north-eastwards later, and the most southern system increasing in depth.

Monday, 30th November, 1903.

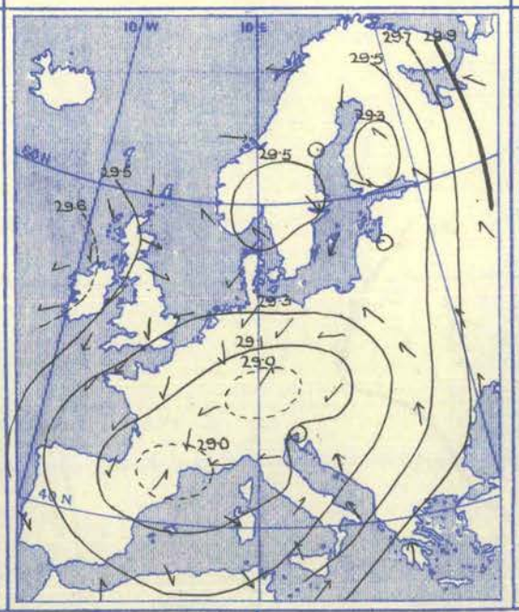
Temperature and Weather. 8 a.m.



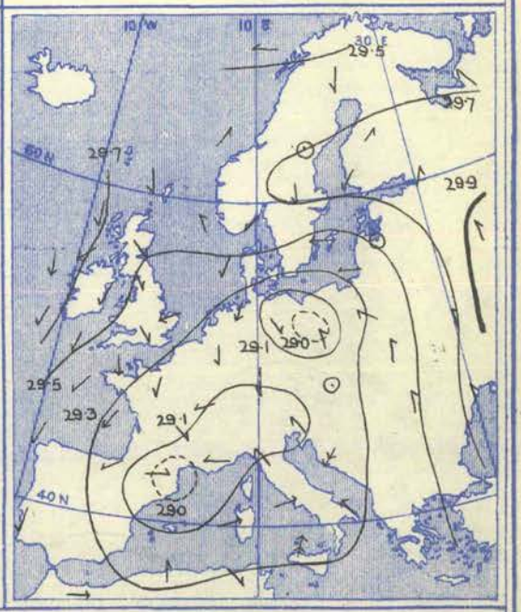
Weather at 8 a.m. temporarily clear in a few localities, but cloudy or overcast as a whole; snow showers falling in various parts of our Islands and northern and central Europe, and rain in the southern regions. Heavy rain later in Algeria and Italy, and also at Bilbao, and considerable falls in most other places. Largest amounts, 2·8 ins. at Algiers, 2·0 ins. at Nemours, and 1·2 ins. at Rome and Bilbao. Heavy snow experienced in the north-east of England—0·9 in. at North Shields and 0·4 in. at Spurn Head.

Temperature fallen except in Russia and at some Scandinavian stations. Morning readings ranging from 64° at Oran, 63° at Malta, and 62° at Athens to below 40° generally, to below 30° in most northern regions and in several parts of our Islands, and to below 20° in Sweden and the north of Russia. Lowest values, 13° at Archangel and Stockholm, and 7° at Karlstad. Maxima during day as high as 68° at Nemours and Oran, and 67° at Malta and Palermo, but low over our area as a whole. Severe frost continuing all day in the far north, and thermometer not rising much above 32° in several parts of France and the United Kingdom.

Barometer and Wind. 8 a.m.



6 p.m.

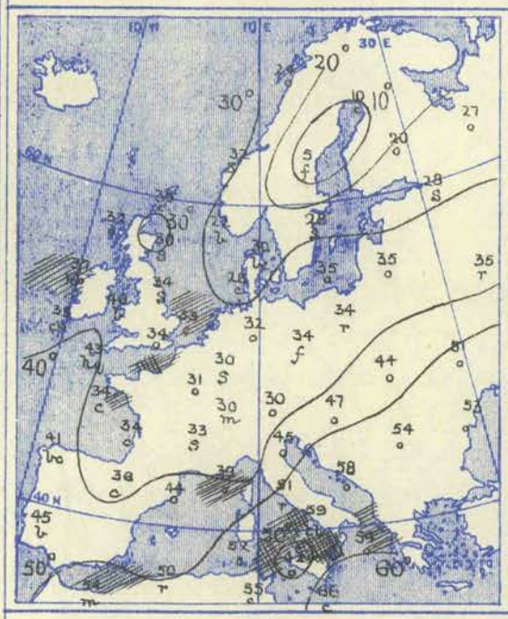


Wind at 8 a.m. varying greatly in direction, but only light or moderate to fresh in force. North-Easterly or Northerly over our Islands, North-Westerly in the Peninsula, South-Westerly or Southerly in Italy, and Easterly in Germany. An anticyclonic circulation prevailing over the southern parts of Norway and Sweden, and a cyclonic circulation over Finland. Some increase in force taking place in Ireland later, and also over Italy and the Mediterranean. A fresh gale prevailing by evening at Palermo, and also at Lesina.

Barometer at 8 a.m. ranging from above 29·9 ins. over the east of Russia, above 29·6 ins. in the west of Ireland, and nearly as high a value over Denmark and the south of Scandinavia, to less than 29·3 ins. in a depression over central Finland, and to below 29·0 ins. in a large and complex disturbance, with one centre near Perpignan and another near Munich. Latter minimum travelling to Prussia later, and that near Perpignan moving south-eastwards. Finnish depression almost entirely dispersing by evening.

Tuesday, 1st December, 1903.

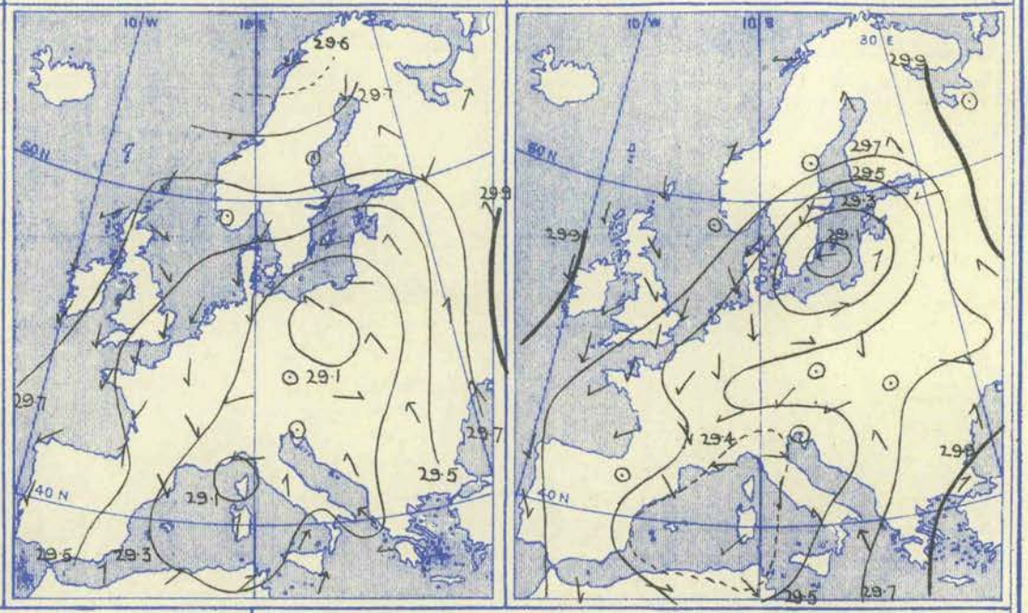
Temperature and Weather. 8 a.m.



Weather at 8 a.m. fine and bright in Spain and Portugal, and fair in most parts of the United Kingdom, but hail or snow showers prevailing at some western and north-eastern stations, as well as at Dungeness. Dull over the major portion of the Continent, with snow in Belgium, the north-eastern and central departments of France, and several parts of Scandinavia and Finland, and either rain or snow in many other regions. A thunderstorm prevailing at Naples. Large amounts of precipitation experienced later in most countries, and a thunderstorm and waterspout at Scilly. More than an inch of rain over the Adriatic and Italy, as well as at Oran and Wisby.

Temperature in morning ranging from 66° at Malta and 62° at Palermo, to below 30° in many parts of Ireland, Scotland, and northern Europe, to 12° at Karlstad, 10° at Haparanda, and to 5° at Hernösand. Exceeding 60° during day at several stations in the extreme south, but remaining low generally. Maxima less than 40° over our area as a whole, and below 32° in the extreme north.

Barometer and Wind. 8 a.m. and 6 p.m.

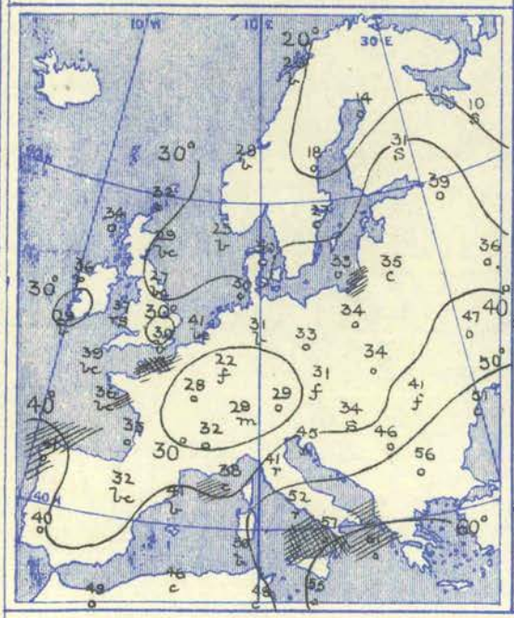


Wind at 8 a.m. showing two extensive cyclonic circulations over the Continent and a partial one in the north of Norway. Northerly current strong over Denmark and its vicinity, and South-South-Westerly winds fresh to a moderate gale over the central part of the Mediterranean. Moderate to fresh Northerly breezes prevailing over our Islands. Northerly wind increasing to a fresh gale by evening over the south of Scandinavia, and remaining strong over Denmark.

Barometer risen except over central Europe. Morning readings ranging from 30·0 ins. in the south of Russia and about 29·8 ins. off the west coasts of Ireland, Scotland, and the Spanish Peninsula, to 29·6 ins. and less in a depression over the north west of Norway, and to below 29·1 ins. (1) in another system over the Gulf of Genoa, and (2) in a third lying over Prussia. Two first-mentioned disturbances partially dispersing during day, but that over Prussia moving north-eastwards to Gothland. Gradients on its northern and eastern sides becoming very steep.

Wednesday, 2nd December, 1903.

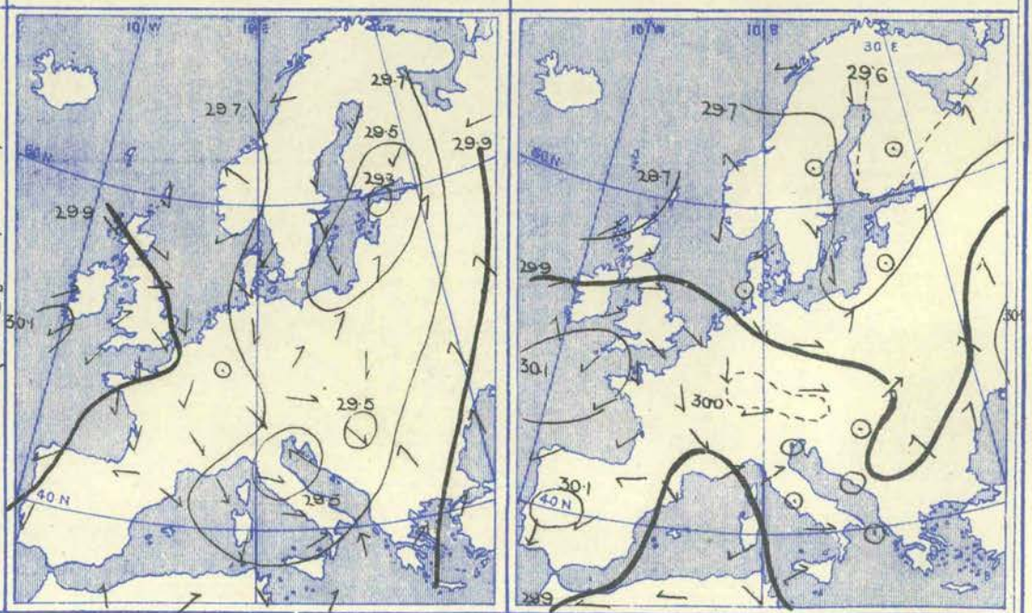
Temperature and Weather. 8 a.m.



Weather in morning fine in nearly all parts of our Islands, but snow locally at Nairn, and showery at Blacksod Point and Holyhead, fine also in Norway and at most of the Spanish and southern French stations, cloudy or dull in most parts of Europe, with snow in northern Russia and at Vienna, and rain at many of the Italian stations. Showers of snow or rain during day at most of our own western and northern stations, but weather remaining fine in the east and south.

Temperature fallen at nearly all our own stations and in most parts of the Continent, risen considerably, however, at many places in northern Europe and slightly over western and northern France. Morning values ranging from 67° at Patras and 65° at Malta, to 21° at Parsonstown, 27° at Shields and 14° at Kuopio. Rising during day in the extreme west, but continuing low in the north of Scotland and south-east of England.

Barometer and Wind. 8 a.m. and 6 p.m.

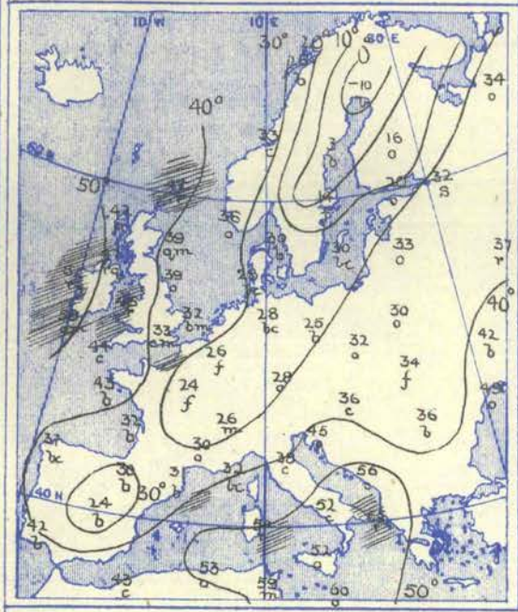


Wind at 8 a.m. Westerly to North-Westerly or Northerly over the north of Ireland, Scotland, and the greater part of England, but drawing into North-East over the southern parts of England and Ireland, as well as over France and Spain. Cyclonic circulation shown over the Gulf of Finland and Bothnia. Southerly to South-Westerly over south-eastern Europe, blowing with the force of a gale in Greece. Wind backing in all parts of our Islands later; no important change elsewhere.

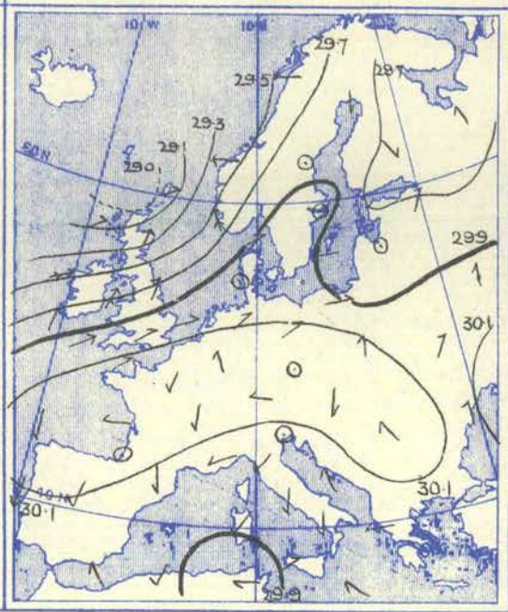
Barometer rising decidedly over the whole of western and southern Europe, falling in the extreme north. Morning readings highest, 30·1 ins. and upwards over the south of Ireland, and a similar value over southern Russia. Lowest, 29·3 ins. and less in a depression over Finland, and 29·4 ins. and less in another over the northern part of the Adriatic. Two latter systems filling up during day. New and decided fall setting in on our north-west coasts by evening.

Thursday, 3rd December, 1903.

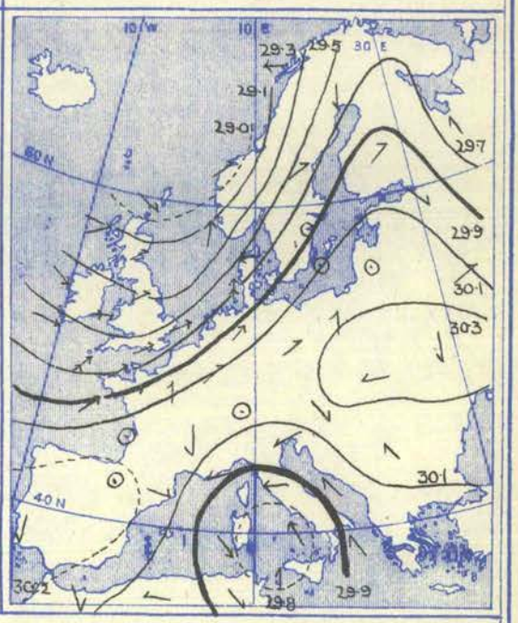
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over the Iberian Peninsula, the west of France, and in Sweden; cloudy or dull elsewhere, with rain in several parts of our Islands and at a few stations on the Continent, snow at St. Petersburg, fog in the north of France, Belgium, and in parts of central Europe. Considerable or heavy falls of rain later in many of the more northern countries, and also in Algeria, some Italian localities, and at Trieste. Largest amounts, 0·9 in. at Holyhead, 1·2 ins. at Rome, and 1·5 ins. at La Calle.

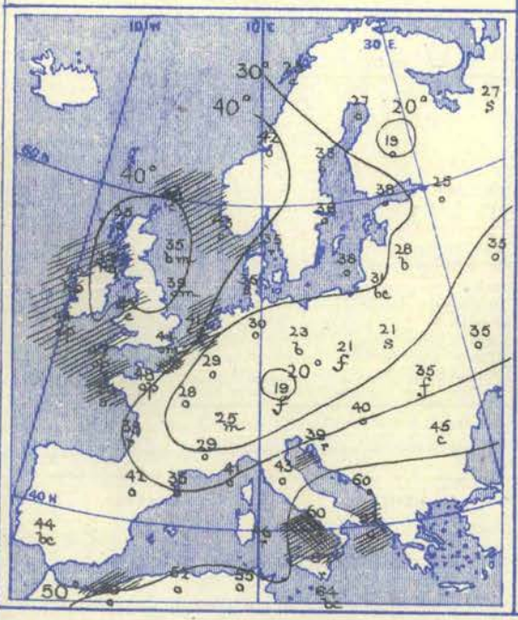
Temperature risen rapidly in nearly all parts of the United Kingdom, and rather decidedly at most Algerian and Norwegian stations; fallen in most other regions, but risen at Archangel. Morning readings highest, 60° at Malta and 56° at Trieste. Lowest, (1) − 10° at Haparanda, + 10° at Karlstad, (2) 28° at Le Mans, 25° at Frankfort, and 32° at Nice, (3) 24° at Madrid, (4) 43° at Nemours, and 45° at Oran. Maxima during day about 50° at our own most western and south-western stations, and 60° or above on some of the southern shores of the Mediterranean. Thermometer continuing low generally.

Wind fresh or strong to a gale from the South-Westward over our Islands, and from South or South-East in Norway. Light and anticyclonic over the Peninsula, France, and throughout central Europe. A complete cyclonic circulation prevailing around Tunis and its neighbourhood, and also over Finland and the north-west of Russia. Wind veering somewhat by evening over the United Kingdom and Scandinavia, and increasing to a gale over England and on the southern and eastern shores of the North Sea.

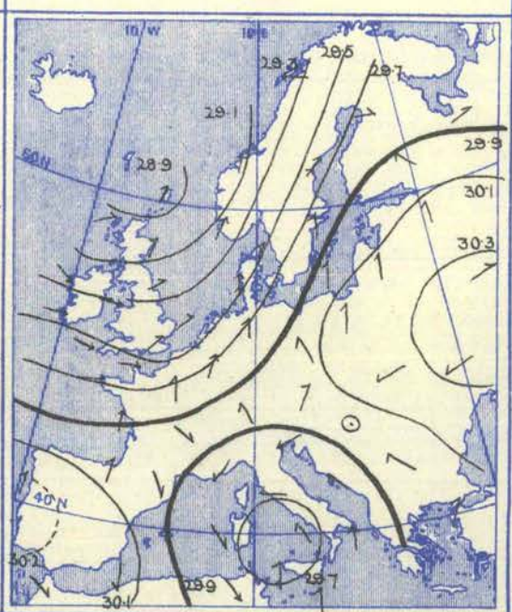
Barometer at 8 a.m. ranging from above 30·1 ins. to above 30·2 ins. in a very long anticyclonic band extending from the north-west of Spain to the south of Russia, to below 29·9 ins. in a depression having its centre near Tunis, to 29·7 ins. and less in a system of rather irregular form over Finland, and to about 29·0 ins. in a deep disturbance, with its centre off the north of Scotland. Finnish depression moving away north-eastwards later, and that in the south becoming centred between Italy and Sardinia. Disturbance in north-west moving north-eastwards, and small secondaries appearing over our western districts.

Friday, 4th December, 1903.

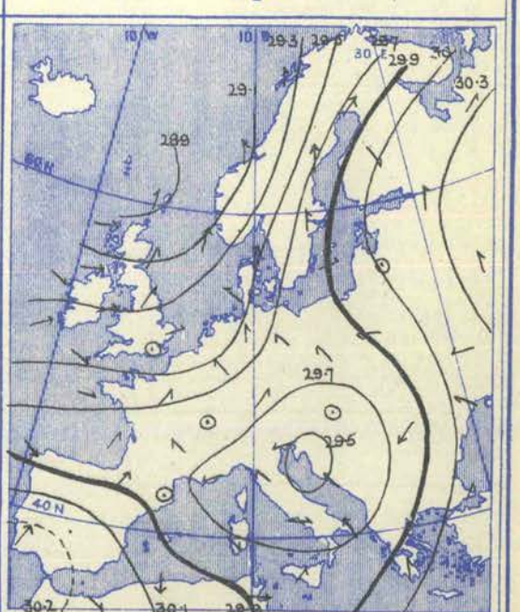
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright in a few isolated places, but cloudy or dull as a whole, and foggy at almost all stations in central Europe. Showery or rainy on our western and southern coasts, snow falling at Vienna and in the north of Russia, and rain in many districts both in the northern and southern parts of our area. Rain or hail experienced later in many parts of our Islands, and also at most Continental stations. Heaviest amounts, 0·4 in. at Jersey, 0·6 in. at Rome, 0·7 in. at Trieste, and 1·3 ins. at Rochefort. Lightning observed at Blacksod Point and Jersey.

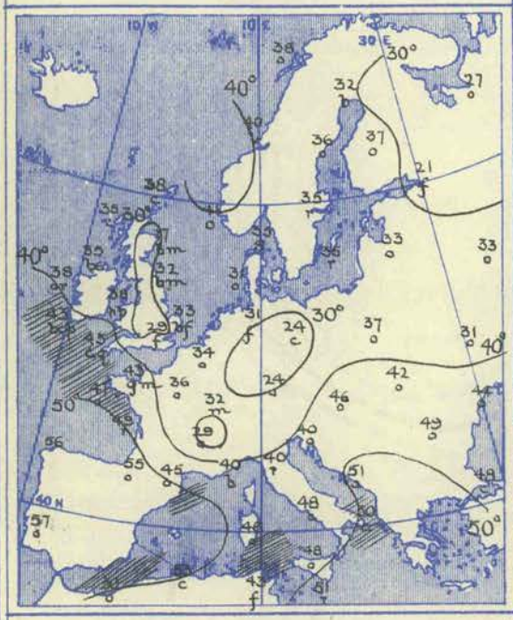
Temperature changed irregularly. Fallen briskly in Ireland and Scotland, risen rapidly in Sweden. Readings in morning ranging from 64° at Malta and 60° at Lesina, to below 30° over the central parts of the Continent, and to 19° at Kuopio and Munich. Maxima during day as high as 50° at Scilly and Jersey, a little higher on the south and west coasts of France, and at most of the extreme southern stations, and above 60° in places, but below 32° at most German stations. Sharp frost at night over the United Kingdom.

Wind at 8 a.m. showing a cyclonic circulation of moderate to strong breezes over the Mediterranean and Italy, and light anticyclonic movements over Russia and Portugal. Westerly to South-Westerly winds—strong in the South—prevailing over the United Kingdom, and strong Southerly winds or gales over the Netherlands, Denmark, and Scandinavia. No great change in direction later, but force decreasing somewhat in the more northern regions.

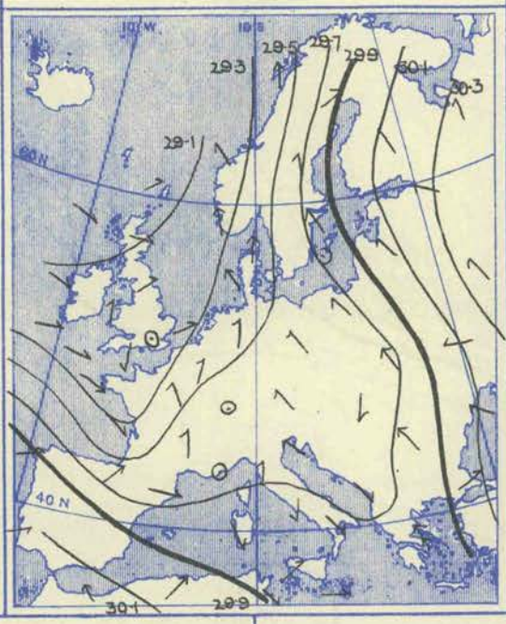
Barometer risen in the east, north-east, and extreme south-west of our area, fallen elsewhere. Readings at 8 a.m. ranging from 30·3 ins. and upwards in central Russia, and above 30·2 ins. in Portugal and the west of Spain, to less than 29·7 ins. in a depression having its centre between Sardinia and Italy, and to 28·9 ins. and less in a very large disturbance lying off the north of Scotland. Former low pressure system travelling away north-eastwards later, and that off Scotland apparently moving northwards. Barometer falling again on our west and south-west coasts.

Saturday, 5th December, 1903.

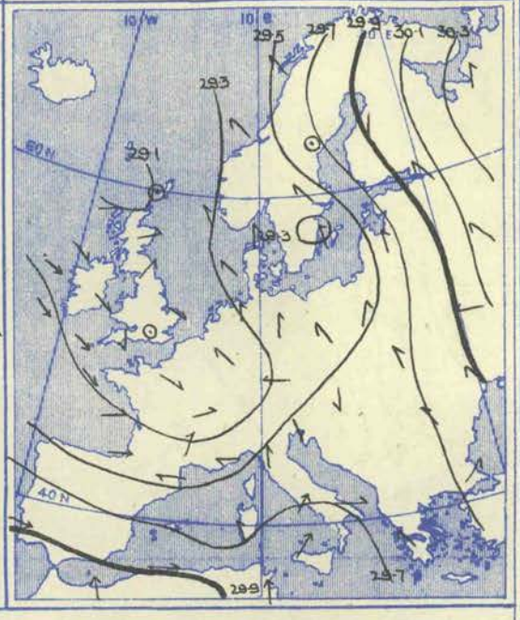
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine in several parts of Great Britain, but densely foggy at many English stations and in Holland. Cloudy or dull over the Continent, with rain in various localities and snow at the Scaw. Rain or hail showers prevailing in the west of Ireland and Wales. Slight rain falling later in many parts of our Islands, rather heavy snow or rain in the northern regions of Europe, and heavy rain in France, Italy, Greece, and most other southern countries.

Temperature fallen quickly over the United Kingdom. Morning readings ranging from 61° at Athens, 57° at Lisbon, and 56° at Corunna, to below 30° degrees in many parts of central and northern Europe and at some of our own stations. Lowest readings, 24° at Munich and 21° at St. Petersburg. Maxima not many degrees above 32° in several parts of our Islands, and low over our area generally. Highest values, 65° at Brindisi, and 68° at Tunis.

Wind at 8 a.m. light and variable over the United Kingdom, strong from the Westward or North-Westward over the west of France and the Peninsula, light and variable over central Europe, and moderate to strong from South-East or South over Denmark and Scandinavia. Moderate to strong breezes from varying directions over the Mediterranean regions, and from the South-Eastward over eastern and north-eastern Europe. Very little change later.

Barometer at 8 a.m. ranging from above 30·3 ins. over central and northern Russia, and 30·2 ins. over Morocco and the west of Algeria to between 29·2 ins. and 29·0 ins. in a large shallow disturbance of an irregular "V" shape, extending from the south-west of France to beyond the north of Scotland. But little modification in the general distribution of barometric pressure later. Depression moving slowly eastwards and barometer rising on our western coasts.

IV.—GENERAL NOTES, etc.

The general distribution of barometric pressure and the state of the weather during this week were very unstable. Cyclonic disturbances were observed at one time or another in all parts of our area except the Spanish Peninsula, but most often over the more northern regions and the Mediterranean. Many of the systems were large and deep, and their accompanying winds strong to a gale in force. Much rain, sleet, or snow was experienced over the most northern countries, and heavy falls of rain in Italy and the surrounding regions; but over the Iberian Peninsula, the south of our Islands, and central Europe the weather was often dry.

Temperature underwent some great and sudden changes over the United Kingdom and Scandinavia, but was generally rather low for the time of year, both in those countries and the other parts of Europe. Severe frost prevailed during most of the week in the far north, and at times in Germany also, while on many occasions sharp night frosts were experienced over these Islands and France, as well as in central Spain. On Saturday, while a shallow and very large depression of a "V" shaped type was passing eastwards over this country and France, a dense fog set in over many parts of England and the Netherlands.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 284.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	10·1	+ 3·1	22	+ 7	SHEFFIELD	7·9	—	15	—	WESTBOURNE	21·5†	+ 8·9	38†	+ 16
STRATHPEFFER SPA	12·9	+ 4·8	27	+ 10	WORKSOP	11·3	+ 2·9	21	+ 5	VENTNOR HOSPITAL	16·2	+ 3·5	28	+ 6
EDINBURGH	3·2	- 4·0	6	- 8	THURCASTON	7·4	- 1·6	14	- 3	BOURNEMOUTH	—	—	—	—
COCKLE PARK	6·1	—	12	—	TUNBRIDGE WELLS	9·7	—	17	—	MARLBOROUGH	6·8	- 2·9	12	- 5
NEWCASTLE-ON-TYNE	2·1	—	4	—	MARGATE	3·0	- 9·1	5	- 16	SOUTHPORT	11·4	—	22	—
YORK	6·8	- 0·2	13	0	BROADSTAIRS	3·0	—	5	—	RHYL	14·9	—	28	—
CROMER	12·0	—	22	—	RAMSGATE	—	—	—	—	ABERDOVEY	21·3†	—	39†	—
LOWESTOFT	10·4	—	19	—	EASTBOURNE	5·8	- 7·5	10	- 13	TENBY	24·3	+ 12·5	44	+ 23
DUNMOW	8·0	—	15	—	BRIGHTON	5·3	- 8·1	9	- 15	TORQUAY	27·1	+ 14·1	48	+ 25
					WORTHING	16·1	—	29	—	NEWQUAY	19·9	+ 6·0	35	+ 11
					BOGNOR	24·7†	—	44†	—	GUERNSEY	8·9†	- 3·0	15†	- 5
					WATERGATE PARK	17·7	—	32	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Nov. 21st, 1903.	Liverpool	—	—	—	—	—	—	—	—	—	—	—	20·0	—	35	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 49.] *Third Series.* WEEK ENDING SATURDAY, DECEMBER 12TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 290.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	46	17	42·1	34·1	38·3	1 below	0	−10	29	+ 2	1891	−116	662	− 47
	1. SCOTLAND, EAST	46	17	40·3	31·1	35·9	2 below	0	−10	43	+ 9	2140	−217	713	− 80
	2. ENGLAND, N.E.	51	21	42·4	32·9	37·8	2 below	1	−11	33	+ 5	2556	− 24	480	−141
	3. ENGLAND, EAST	51	26	44·0	34·7	39·6	0 (average)	6	− 7	29	− 3	3080	+ 89	443	−239
	4. MIDLAND COUNTIES	53	23	44·2	33·5	39·1	0 (average)	6	− 6	33	0	2821	−114	505	−208
	5. ENGLAND, SOUTH	53	21	47·2	37·1	42·3	1 above	23	+ 4	14	− 8	3292	− 21	292	−199
Principal Grazing Districts.	6. SCOTLAND, WEST	49	27	44·3	37·2	40·9	0 (average)	6	− 9	19	− 2	2472	− 60	432	−102
	7. ENGLAND, N.W.	50	21	44·8	36·5	40·8	1 below	8	− 8	22	+ 1	2763	− 18	363	−126
	8. ENGLAND, S.W.	53	26	48·5	37·8	43·4	1 above	27	+ 3	12	− 3	3212	+ 88	222	−149
	9. IRELAND, NORTH	49	26	44·2	36·3	40·4	1 below	6	−11	23	+ 3	2561	−118	379	− 80
	10. IRELAND, SOUTH	53	26	46·3	37·9	42·3	1 below	19	− 7	11	− 4	3075*	+ 1	270*	− 65
	— CHANNEL ISLANDS	55	33	50·3	42·0	46·3	0 (average)	30	− 7	0	− 4	3797	+ 98	59	− 72

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 290.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	6	8 less	249	+36	64·9	+18·4	5	− 1	10	− 1	1022	− 83	24	− 2
	1. SCOTLAND, EAST	6	9	2 more	221	+37	38·3	+ 8·8	3	− 5	7	−10	1163	−113	27	− 3
	2. ENGLAND, N.E.	5	5	1 less	188	+18	30·6	+ 6·6	4	− 6	7	−12	1269	− 87	30	− 2
	3. ENGLAND, EAST	6	10	5 more	172	+ 2	29·7	+ 6·7	2	− 9	4	−16	1430	−125	34	− 3
	4. MIDLAND COUNTIES	6	9	4 more	184	+20	34·3	+ 8·2	5	− 3	9	− 6	1255	− 85	30	− 2
	5. ENGLAND, SOUTH	7	20	13 more	189	+29	36·0	+ 9·4	5	− 5	8	−10	1518	− 49	36	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	7	19	5 more	232	+41	65·2	+18·2	5	− 2	10	− 4	1281	− 36	30	− 1
	7. ENGLAND, N.W.	6	12	4 more	218	+37	43·8	+11·1	6	− 3	12	− 6	1374	+ 63	32	+ 2
	8. ENGLAND, S.W.	7	26	16 more	210	+27	47·6	+11·0	12	+ 1	21	+ 1	1504	− 96	35	− 2
	9. IRELAND, NORTH	7	14	5 more	252	+36	45·9	+11·6	6	− 2	13	− 5	1166	− 76	27	− 2
	10. IRELAND, SOUTH	7	19	9 more	229	+35	46·4	+ 8·4	10	− 1	19	− 3	1314	−108	31	− 3
	— CHANNEL ISLANDS	7	20	11 more	228	+40	37·3	+ 6·4	12	− 1	22	− 2	1738	−111	41	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather was extremely changeable, with frequent rain in all districts, and with snow or sleet on Sunday and Monday in several isolated places. Thunder and lightning occurred at Valencia on Wednesday, and lightning was seen on the same day at Markree Castle, Stonyhurst, and Llandudno.

Temperature differed but little from the average. In the south and south-west of England it was slightly above the normal, while in Ireland and the northern parts of England it was below it, but in all other districts the agreement with the average was almost absolute. Highest readings were observed on Tuesday or Wednesday, when the thermometer rose to 50° and upwards over nearly the whole of England and the south of Ireland, and to 55° at Jersey; in the north-east of Scotland it did not get much above 45°. Lowest readings were observed on Sunday or Monday, when sharp frost occurred in most districts, the sheltered thermometer falling below 25° in many parts of Great Britain, to 21° in England N.E., N.W., and S., and to 17° at Scotland N. and E. (at Lairg and Braemar).

Rainfall was considerably in excess of the average over the United Kingdom generally, but showed a slight deficit in England N.E. and a large deficit in Scotland N. In England S.W. the total was more than two and a half times, and in England S. nearly three times as much as the average.

Bright Sunshine was less than the average in all districts excepting England S.W. The percentage of the possible duration ranged from 22 in the Channel Islands, 21 in England S.W., and 19 in Ireland S., to less than 10 in most of the Wheat-Producing districts, and to only 4 in England E.

Barometer and Wind. During the greater part of the week the barometer was highest over Russia and Sweden, but somewhat high over Spain and Algeria. In these Islands the weather was influenced by cyclonic disturbances which advanced from the Atlantic, the wind being chiefly from the Southward or Westward, and often strong to a gale in force on our western and southern coasts. Early on Saturday a deep depression appeared over the northern part of the Bay of Biscay, and later in the day, when the centre of this moved slowly north-eastward, the wind increased to a strong gale from the South-Eastward over the English Channel, while heavy rain fell all over our south-western counties.

2083r. Wy. & S. Ltd.
370 12 | 03

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	46	34	44·3	38·7	41·6	+ 1·5	6	14	6	0·47	− 0·53	*	*	*	*
	Stornoway	46	29	43·7	33·3	38·7	− 1·4	5	33	6	1·43	+ 0·15	6·1	− 0·2	14	0
	Wick	46	27	44·6	39·6	42·2	+ 3·4	11	7	6	0·59	− 0·12	*	*	*	*
	Lairg Ⓢ	43	17	37·9	27·0	32·7	− 3·1	0	65	5	0·60	− 0·30	*	*	*	*
	Glencarron Ⓢ	45	28	40·2	32·0	36·3	− 1·5	0	40	4	0·17	− 2·11	*	*	*	*
	Fort Augustus Ⓢ	45	28	41·1	32·4	36·9	− 2·1	0	36	3	0·23	− 0·94	—	—	—	—
	Fort William	45	34	42·7	36·0	39·5	− 0·8	2	23	5	0·67	− 1·50	1·3	− 2·0	3	− 4
1. SCOTLAND, E.	Nairn	42	26	39·4	29·4	34·6	− 3·8	0	52	4	0·32	− 0·18	*	*	*	*
	Aberdeen	45	22	43·6	31·0	37·6	− 1·1	4	42	6	1·29	+ 0·55	0·9	− 8·5	2	− 18
	Braemar Ⓢ	38	17	36·9	28·9	33·1	− 2·5	0	62	7	0·98	+ 0·21	*	*	*	*
	Ochtertyre Ⓢ	41	28	39·3	32·9	36·2	− 2·0	0	41	7	2·14	+ 1·16	*	*	*	*
	Leith	46	26	43·7	33·6	38·9	− 1·4	5	32	5	0·31	− 0·13	*	*	*	*
	Marchmont Ⓢ	43	24	39·0	30·9	35·1	− 2·5	0	48	5	0·54	− 0·18	4·3	− 3·8	9	− 8
2. ENGLAND, N.E.	Alnwick Castle	44	21	41·2	30·1	35·9	− 3·5	0	43	6	0·72	+ 0·02	*	*	*	*
	Durham	44	22	40·3	31·6	36·1	− 2·6	0	41	5	0·25	− 0·34	3·9	− 6·1	8	− 12
	Shields	45	27	42·4	33·0	37·9	− 2·0	1	33	5	0·37	− 0·17	*	*	*	*
	Scarborough Ⓜ	46	25	42·9	33·6	38·4	− 1·7	3	31	6	0·57	− 0·07	5·3	—	10	—
	Spurn Head	45	29	42·6	33·9	38·4	− 2·1	2	30	4	0·36	− 0·11	*	*	*	*
	Fulbeck (Lincolnshire)	51	28	44·9	34·9	40·1	+ 1·9	8	28	5	0·49	+ 0·04	3·6	—	7	—
3. ENGLAND, E.	Hillington Ⓜ	49	28	42·7	33·7	38·4	− 0·3	2	31	7	1·45	+ 0·89	2·2	− 7·7	4	− 15
	Yarmouth	48	26	44·0	34·9	39·6	0·0	6	27	7	0·74	+ 0·16	*	*	*	*
	Geldeston	49	26	44·2	34·3	39·5	− 0·3	6	30	6	0·76	+ 0·23	3·0	− 8·7	6	− 16
	Cambridge	51	27	43·8	33·6	38·9	− 0·3	5	32	6	0·95	+ 0·55	1·7	− 8·3	3	− 16
	Felixstowe	49	28	43·2	35·9	39·7	− 0·8	3	23	5	0·63	—	5·8†	—	11†	—
	Rothamsted	50	27	44·8	34·1	39·7	+ 0·5	8	31	6	1·83	+ 1·27	0·9	− 9·6	2	− 18
	Shoeburyness	50	27	45·4	36·4	41·1	+ 0·5	10	23	6	0·71	+ 0·28	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	45	24	42·2	32·5	37·5	− 1·1	1	34	6	1·01	+ 0·30	5·2	—	10	—
	Bawtry (Hesley Hall)	46	24	42·3	31·9	37·3	− 1·6	1	37	6	0·52	+ 0·05	*	*	*	*
	Nottingham	50	27	44·1	33·7	39·1	− 0·1	6	32	5	0·59	+ 0·12	2·6	—	5	—
	Loughborough	50	27	44·2	34·1	39·4	+ 0·2	6	31	5	0·98	+ 0·44	*	*	*	*
	Colly Weston (Stamford)	48	27	43·3	33·1	38·4	− 0·3	4	33	6	0·77	+ 0·27	*	*	*	*
	Cheadle Ⓜ	47	25	41·8	32·0	37·1	− 1·0	0	34	6	1·19	+ 0·46	*	*	*	*
	Birmingham (Edgbaston)	50	29	43·4	35·0	39·4	− 0·3	4	27	6	1·28	+ 0·74	3·1	—	6	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	50	23	46·2	33·9	40·3	+ 0·4	12	33	5	1·00	+ 0·45	*	*	*	*
	Cirencester	53	25	48·6	32·8	41·0	+ 2·1	18	39	6	1·24	+ 0·59	12·1	+ 2·1	22	+ 4
	Oxford	50	28	46·0	36·1	41·3	+ 1·5	11	25	5	0·85	+ 0·35	6·1	− 3·9	11	− 7
5. ENGLAND, S.	London	53	28	46·9	35·7	41·5	+ 1·0	14	27	6	1·10	+ 0·60	1·3‡	− 4·2‡	2‡	− 8‡
	Swarraton (Alresford) Ⓜ	51	21	46·1	33·5	40·1	+ 0·8	11	35	7	3·01	+ 2·31	*	*	*	*
	Dungeness	51	29	48·1	39·0	43·7	+ 1·8	25	8	6	1·27	+ 0·77	4·4	—	8	—
	Hastings (St. Leonards)	50	28	46·3	38·6	42·6	+ 0·8	18	10	6	1·25	+ 0·58	1·7	− 12·1	3	− 22
	Southampton	53	29	47·7	37·2	42·7	+ 0·8	25	13	7	2·60	+ 1·87	9·6	− 2·1	18	− 4
	Portland Bill	52	31	49·3	40·0	44·8	+ 1·7	28	6	7	1·72	—	*	*	*	*
	Shaftesbury Ⓜ	50	29	45·9	35·5	40·9	+ 2·3	11	27	7	2·74	+ 1·99	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	46	32	44·0	36·3	40·3	− 1·3	6	22	7	2·67	+ 0·53	*	*	*	*
	Glasgow	45	31	42·6	36·7	39·8	+ 0·2	2	20	6	0·63	− 0·32	0·0	− 4·4	0	− 9
	Cally Ⓢ	49	27	46·0	37·0	41·7	+ 1·9	11	22	7	2·75	+ 1·55	*	*	*	*
	Aspatria	46	29	43·3	36·6	40·1	− 0·1	4	21	7	1·24	—	5·6	—	11	—
	Douglas (Isle of Man)	48	30	45·7	39·2	42·6	0·0	16	8	7	2·12	+ 1·05	9·9	+ 0·7	19	+ 1
7. ENGLAND, N.W.	Newton Rigg	44	21	41·7	32·3	37·2	− 3·2	0	34	7	1·57	—	6·6	—	13	—
	Stonyhurst	46	27	41·7	35·2	38·6	− 1·0	0	24	5	1·09	− 0·01	1·3	− 5·3	3	− 10
	Blackpool Ⓜ	48	27	45·6	35·7	40·9	+ 0·4	10	26	6	1·04	+ 0·30	2·6	− 4·0	5	− 8
	Manchester (Prestwich)	46	28	43·1	35·6	39·5	− 0·1	3	24	5	0·77	− 0·08	2·0	—	4	—
	Liverpool Obsy. (Bidston)	48	30	45·0	36·1	40·7	− 0·4	8	24	6	0·60	0·00	8·9	—	17	—
	Chester (Hawarden Bridge)	50	32	47·4	37·6	42·7	+ 0·8	23	12	4	0·37	—	*	*	*	*
	Llandudno Ⓜ	50	34	48·4	38·6	42·7	− 0·4	19	10	7	1·24	+ 0·52	8·5	− 0·2	16	0
	Holyhead	49	36	46·4	40·9	43·8	− 0·2	17	3	7	1·66	+ 0·78	*	*	*	*
	Bettws-y-Coed	49	30	45·9	36·3	41·3	− 1·6	11	24	7	2·46	—	6·4	—	12	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	52	37	50·0	41·9	46·1	+ 1·2	29	9	7	1·99	+ 1·05	9·3	− 1·4	17	− 3
	Clifton	52	30	48·0	37·6	43·0	+ 2·1	25	12	6	1·88	+ 1·12	*	*	*	*
	Bath	53	27	48·9	36·1	42·8	+ 2·1	30	17	6	1·66	+ 0·98	8·6	—	16	—
	Arlington (N. Devon)	50	30	46·6	36·4	41·7	+ 0·2	13	24	7	2·98	+ 1·57	*	*	*	*
	Cullompton Ⓜ	52	26	48·4	34·3	41·9	+ 1·4	18	32	7	2·73	+ 1·88	10·8	+ 1·2	20	+ 2
	Falmouth	53	35	48·6	39·4	44·2	− 1·4	26	7	7	3·84	+ 2·57	17·5	+ 4·1	31	+ 7
	Plymouth	53	33	49·2	38·7	44·2	+ 0·3	29	9	7	3·11	+ 2·17	13·0	+ 0·8	23	+ 1
9. IRELAND, N.	Malin Head	46	30	44·1	36·9	40·6	− 2·1	6	20	7	0·68	− 0·09	*	*	*	*
	Edenfel (Omagh)	46	26	42·6	33·4	38·2	− 0·6	2	32	7	1·81	+ 0·95	*	*	*	*
	Blacksod Point	49	34	46·6	39·0	43·0	− 0·8	20	8	7	1·71	+ 0·35	*	*	*	*
	Markree Castle	49	32	43·0	35·8	39·5	− 0·8	3	23	7	1·47	+ 0·51	4·4	− 4·3	9	− 9
	Armagh	46	30	43·1	36·0	39·7	− 0·2	3	23	5	1·10	+ 0·43	8·4	− 0·8	17	− 2
	Donaghadee	47	31	45·9	36·6	41·4	− 0·7	11	23	7	1·69	+ 1·01	*	*	*	*
10. IRELAND, S.	Dublin	49	32	45·7	38·5	42·2	− 0·4	16	10	6	0·85	+ 0·31	15·0	+ 2·3	29	+ 4
	Birr Castle	49	27	45·6	35·1	40·6	− 0·2	10	28	6	1·39	+ 0·65	8·8	− 2·0	17	− 4
	Kilkenny	49	26	45·4	34·4	40·1	− 1·6	10	30	7	1·37	+ 0·62	*	*	*	*
	Waterford	49	32	44·6	39·4	42·1	− 0·3	12	7	7	2·43	+ 1·43	*	*	*	*
	Roche's Point	51	32	47·1	37·6	42·5	− 2·5	22	12	6	1·03	− 0·19	*	*	*	*
	Valencia	53	35	49·4	40·7	45·2	− 0·6	28	4	7	2·08	+ 0·66	6·2	− 4·4	12	− 9
	Killarney	51	33	47·0	38·6	43·0	− 1·0	21	10	7	2·51	+ 0·88	*	*	*	*
	Foynes	49	30	45·6	38·7	42·3	− 0·4	16	9	7	3·66	+ 2·61	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	39	50·1	42·6	46·5	− 1·3	32	0	7	2·26	+ 1·32	16·2	+ 1·8	29	+ 3
	Jersey	55	33	50·4	41·4	46·1	+ 1·0	31	2	7	1·79	+ 0·82	10·7	− 4·0	19	− 8

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

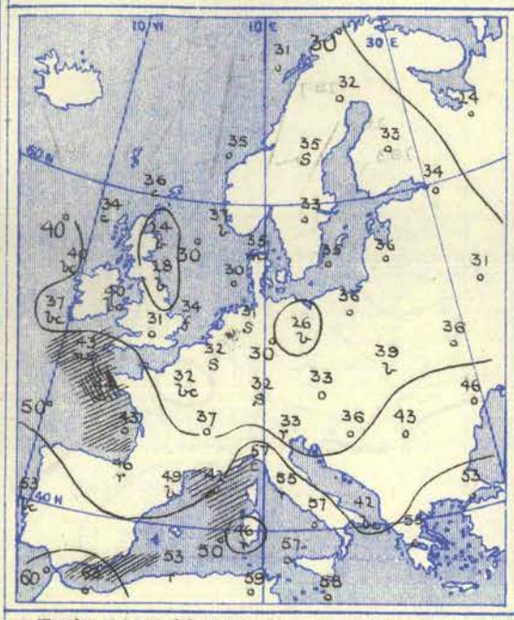
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

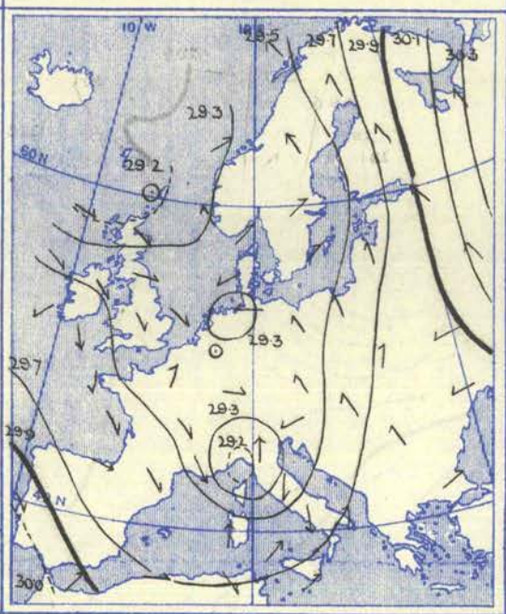
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 6th December, 1903.

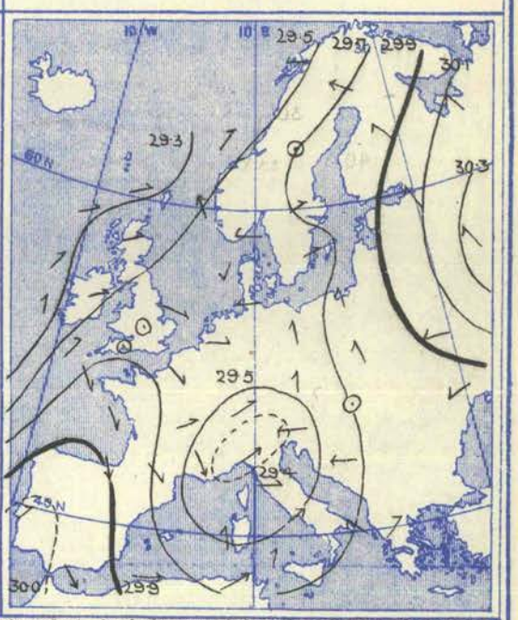
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fair at most of our own stations, but showery in a few localities and foggy on the east and south-east coasts of England and at Liverpool. Cloudy or dull in nearly all Continental regions, with rain on various shores of the Mediterranean and in several northern countries, and snow at Brussels, Munich, and Hernösand. Rain (or snow) falling in most places later—most heavily in Italy and its neighbourhood. Largest amount, 1·1 ins. at Florence. A thunderstorm experienced at Nice.

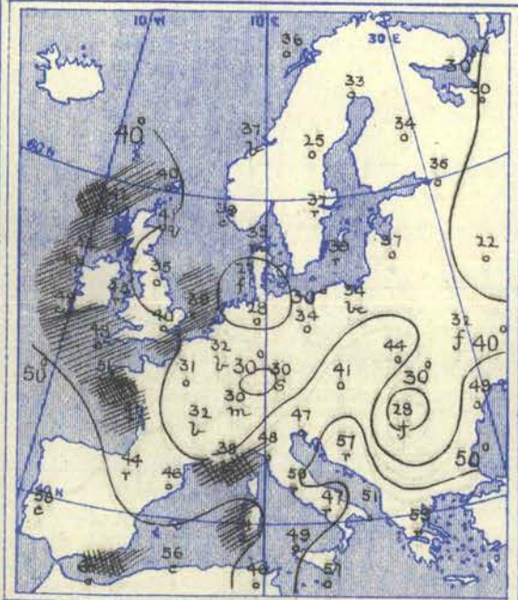
Temperature risen over Italy and Algeria, changed little or fallen elsewhere. Morning readings highest, 63° at Nemours, 59° at La Calle, and 58° at Malta. Lowest, (1) 24° at Archangel, 31° at Moscow, (2) 24° at Aberdeen and below 32° in many parts of the United Kingdom, (3) 34° at Turin and 42° at Cape Sicié, (4) between 26° and 36° over central Europe. Rising to about 50° on our most western and south-western coasts later, to a few degrees higher in Italy and at a few French stations, and to 66° at Palermo, Nemours, and Tunis. Maxima below 40° over Europe generally, as well as over the east and centre of England.

Wind at 8 a.m. showing a complete cyclonic circulation around the Gulf of Genoa and Holland; moderate or light generally, but Southerly and South-Westerly winds fresh to a moderate gale over Algeria and the adjacent Islands. Mainly Westerly or North-Westerly over our Islands and the Iberian Peninsula and of little strength, and moderate to strong from between South and South-East over the eastern half of our area. Wind backing to the Southward along our western coasts during day, and increasing to a strong breeze by evening and to a gale by night.

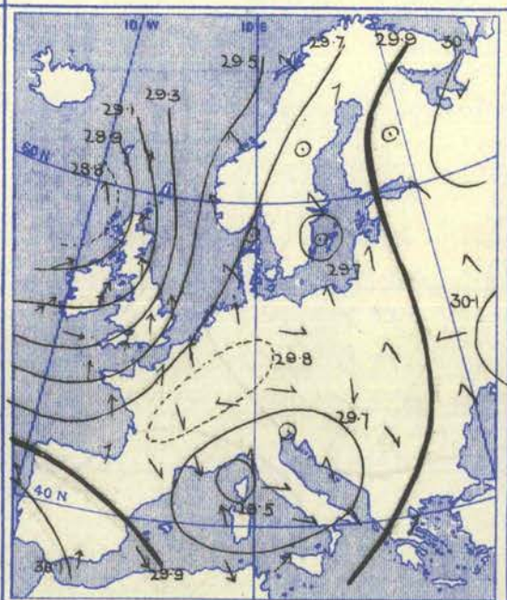
Barometer at 8 a.m. ranging from 30·3 ins. in the north-east of Russia and 30·0 ins. in the south of Portugal, to below 29·4 ins. in a very extensive and irregular area of low pressure extending from the Gulf of Genoa to beyond the north of Scotland. Lowest readings 29·2 ins. and less, found in the last-named region. Pressure increasing in most places later but a brisk decrease setting in in Ireland and spreading westward.

Monday, 7th December, 1903.

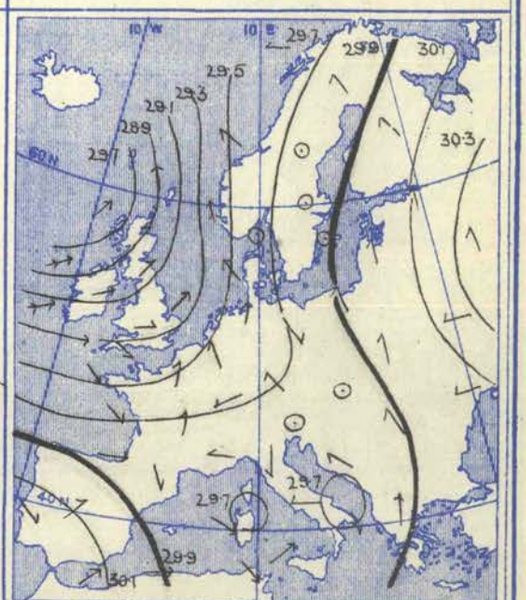
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull in almost all places, with snow at Karlstad and Munich, sleet at Leith, and rain in various other localities. Considerable rain falling later in different parts of France, Italy, and on the shores of the Mediterranean, and also in the east of Scotland and at Parsonstown and Jersey; slighter amounts in most other regions. Some snow at a few French stations.

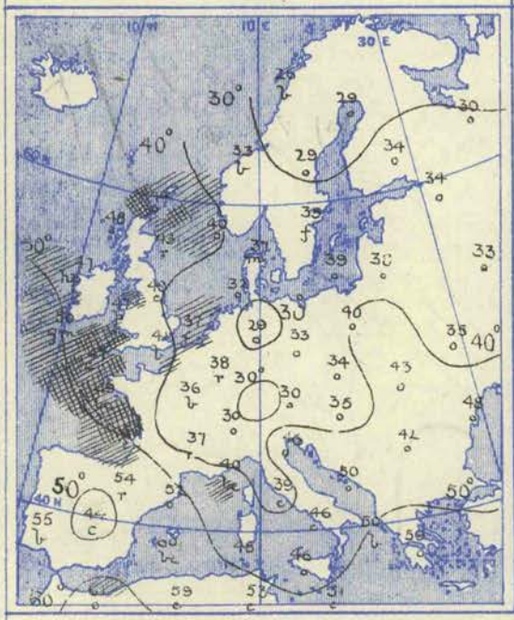
Temperature risen as a whole, but fallen at Moscow and in Italy and France. Morning readings ranging from 60° at Nemours, 59° in Greece, and 58° at Lisbon, to below 40° over the major portion of our area, to 29° at Limoges, 25° at Hernösand and St. Petersburg, and to 22° at Moscow. No higher than 44° at Sfax. Rising subsequently to 68° at Nemours, 64° in the south of Greece, and to 61° at Lisbon, but remaining below 40° in most of the more northern countries and also in the inland departments of the south-east of France.

Wind at 8 a.m. strong to a gale from between South and South-West over the United Kingdom and its neighbourhood, and moderate to strong from South-East on the Norwegian coast. A cyclonic circulation of light to fresh or strong winds prevailing around Corsica, and a similar movement of light winds shown around Gothland. Wind veering somewhat over most parts of our Islands during day, but continuing strong to a gale. South-South-Easterly wind increasing to a fresh gale on the south-west coast of Norway.

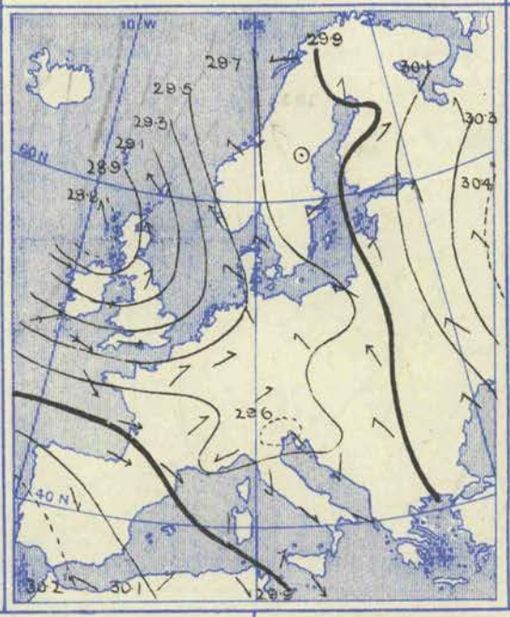
Barometer at 8 a.m. ranging from above 30·2 ins. in an anticyclone over Little Russia, above 30·1 ins. in a separate "high" over the north of Russia, and above 29·8 ins. in an area of relatively high readings extending from the south-west of France nearly to Berlin, to about 29·6 ins. in a depression near Wisby, about 29·5 ins. in another over Corsica, and to below 28·8 ins. in a large and deep system lying off our north-western coasts. Last mentioned system moving slowly northwards later, and a small secondary passing eastwards across England. Gradients increasing in Ireland and over the North Sea.

Tuesday, 8th December, 1903.

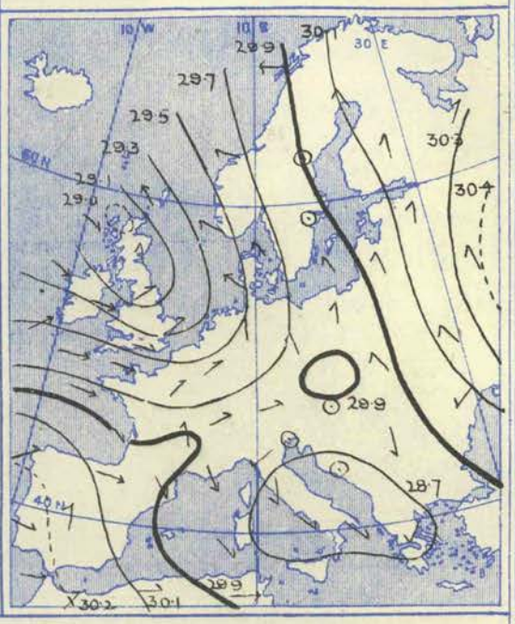
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull very generally. Rain falling in several parts of the Continent, snow at Frankfort, and showers or steady rain over the United Kingdom. A good deal of rain experienced in most places later—largest amounts, 0·59 in. at Athens and 1·0 in. at Leghorn.

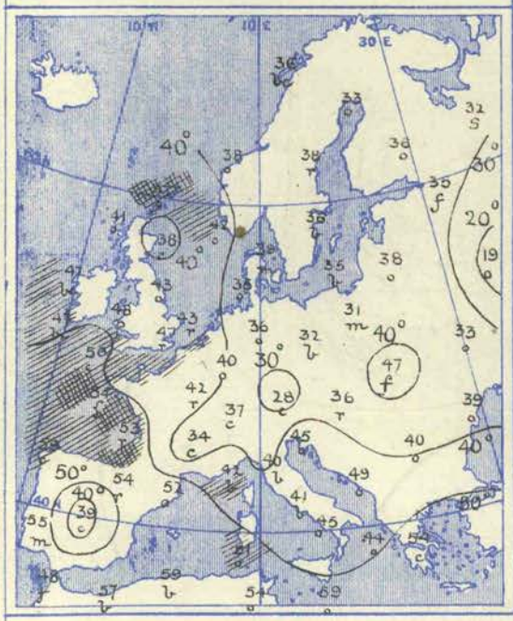
Temperature fallen in Italy, Portugal, and the north of Scandinavia, risen in most other regions. Morning readings highest, 61° in western Algeria, 59° at Athens, and 54° at Biarritz. Lowest, (1) 26° at Bodö, (2) 30° at Archangel, 33° at Moscow, and 31° at Kharkov, (3) 29° at Cuxhaven, 30° at Munich. Rising later to 50° or a degree or two higher on our extreme west and south-west coasts, in most parts of France, to a rather higher value in most Mediterranean regions, to 66° at Brindisi, and to 70° at Oran. Maxima below 40° at some German and Austrian stations.

Wind at 8 a.m. strong to a gale from the Westward over our western and southern coasts, and the west and north of France, and fresh or strong from the Southward or South-Eastward on our eastern and northern coasts, and over the North Sea. Light or moderate and irregularly cyclonic over the north of Italy. Light from some Southerly points over Russia and Finland. No general change later.

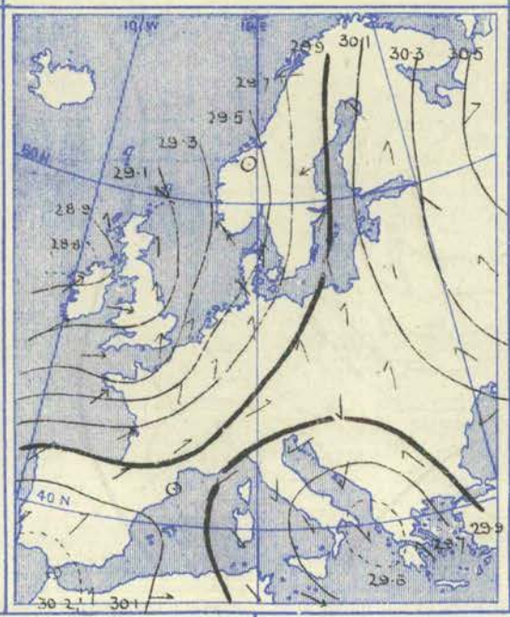
Barometer at 8 a.m. highest, above 30·4 ins. in an anticyclone extending from the eastward to central Russia, and above 30·2 ins. over Portugal. Lowest, 28·8 ins. and less in a depression centred off our north-west coasts. Below 29·6 ins. in another depression over the north of Italy. Latter low pressure system moving south-eastwards later in day and becoming less well-defined, and the former travelling eastwards or north-eastwards, and becoming less deep. A general but not very decided increase of pressure taking place in almost all parts of our area.

Wednesday, 9th December, 1903.

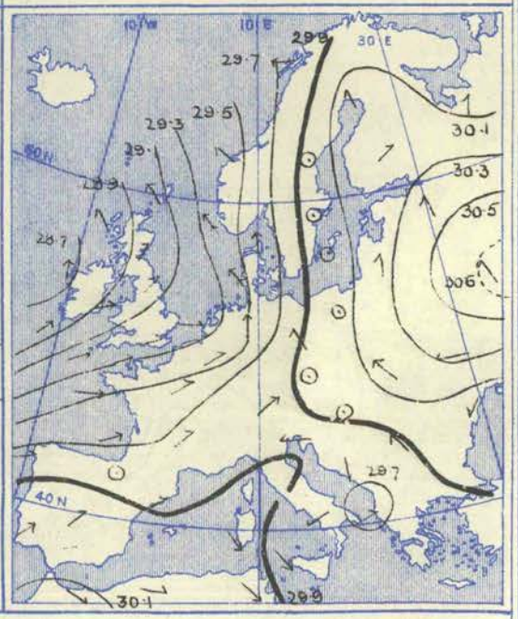
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. in a very unsettled state generally, with squalls and showers over the United Kingdom, and rain in many continental regions, snow at Archangel, and fog at St. Petersburg and in Hungary. Rain falling in all countries later, and a thunderstorm occurring at Valencia Island.

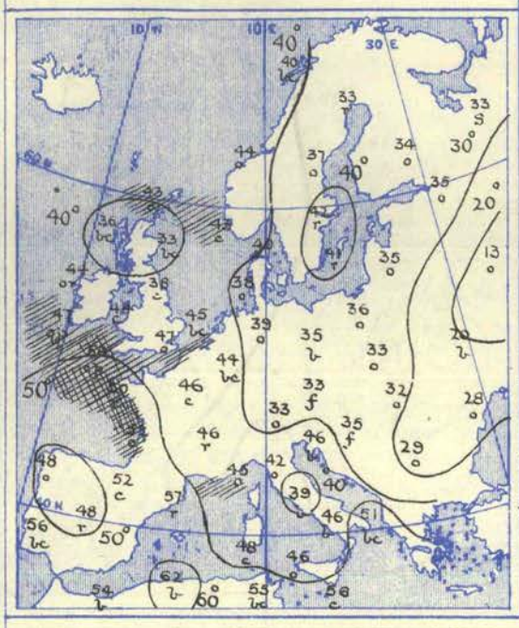
Temperature changed irregularly. Morning readings highest, 59° at Algiers, 55° on the Portuguese coast and at Lorient, and 54° at Malta and Patras. Lowest (1) 19° at Moscow, 21° at Kharkov, (2) 27° at Prague, (3) 32° at Nairn, (4) 39° at Madrid. Maxima during day exceeding 50° in many parts of our Islands, nearly touching 60 in Italy and the south of France, and rising to between 60° and 70° in Algeria. Thermometer remaining below 40° in many parts of central Europe,

Wind at 8 a.m. circulating cyclonically but with little strength over the Adriatic. Strong to a gale from between West and South-West or South over Ireland and England and France, and from the South-Eastward over Denmark, the south of Norway, and in the Shetlands. Light from South or South-East over Russia and its neighbourhood. Scarcely any change during day.

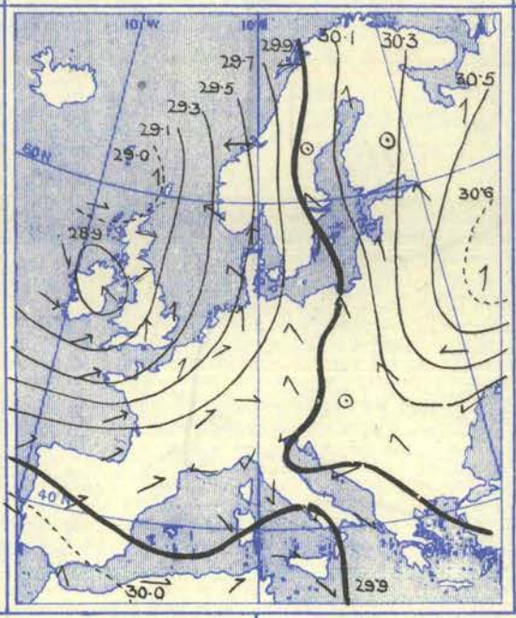
Barometer at 8 a.m. ranging from above 30·5 ins. in an anticyclone extending from the eastward to the north of Russia, and above 30·2 ins. over the south of Spain and Morocco to below 29·6 ins. in a depression over the Adriatic, and to less than 28·8 ins. in another system off the north-west of Ireland. Highest pressure becoming transferred to central Russia by evening, and Irish depression apparently being joined by another from the Atlantic. No great change taking place in the general distribution of pressure.

Thursday, 10th December, 1903.

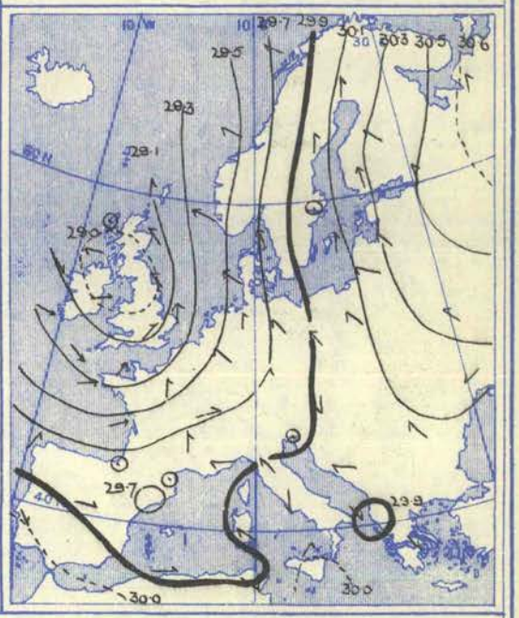
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright at most Italian and Algerian stations, but still cloudy or dull over our area generally, rainy in many western and northern regions, and also at Madrid, and snow falling at Archangel. Fog prevailing in some parts of central Europe and at Florence. Rain falling later over the western half of Europe—largest amounts, 0·5 in. at Blacksod Point and Aberdeen, and 1·3 ins. in the south-east of France.

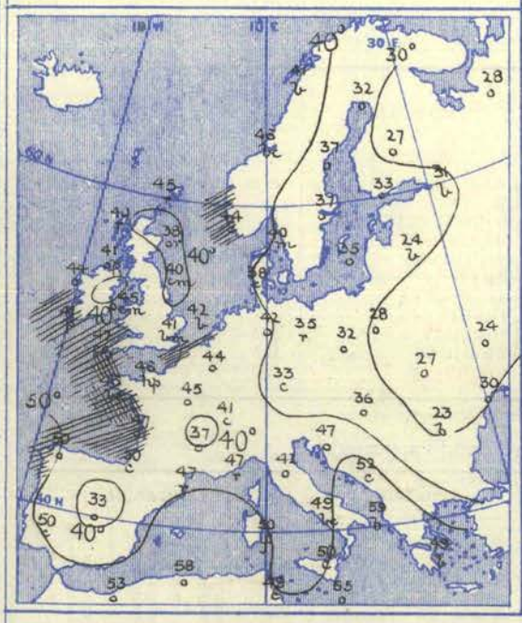
Temperature fallen in most localities. Morning readings ranging from 62° at Algiers and 56° at Malta and Lisbon, to below 40° in most northern and central regions, to 33° at Florence, 30° at Vienna, 20° at Kiev, and to 13° at Moscow. Lowest in our Islands, 29° at Nairn. Rising subsequently to 50° or slightly higher at some of our own southern stations and in most parts of France and the south of Italy, to 61° at Barcelona, 63° at Palermo, 68° at Nemours, and to 74° at Algiers.

Wind at 8 a.m. showing an extensive cyclonic circulation over our Islands and the western countries generally; moderate in force as a whole, but the Westerly and South-Westerly current strong to a moderate gale over our southern districts and the north of France, and South-Easterly wind strong at Skudesnaes. Light or moderate breezes between East and South-East or South over the eastern portion of our area. Extremely little change taking place during day.

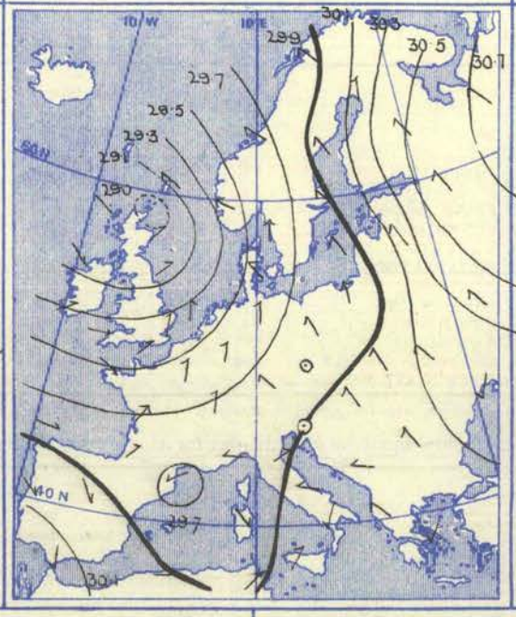
Barometer risen in the east and fallen in the west of Europe. Readings in morning ranging from 30·60 ins. at Moscow, to below 28·9 ins. (1) in a depression having its centre over Ireland, and (2) in another centre lying to the north-westward of Scotland. Latter minimum apparently moving away or dispersing later, and that over Ireland moving slowly eastwards and decreasing in depth. Russian anticyclone spreading very slowly westwards. A small depression becoming developed over the extreme north-east of Spain.

Friday, 11th December, 1903.

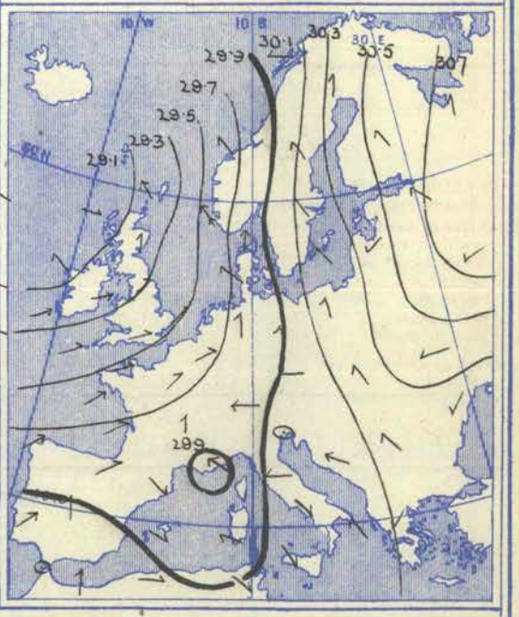
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine over the greater part of England and also in the west of Norway and in Greece and southern Italy. Cloudy or dull in all other parts of Europe, with rain in the north of Scotland and passing showers at some of our western stations; rain falling also in the south of France and at Berlin and Copenhagen. Showers occurring later in nearly all parts of the United Kingdom, and heavy rain in the west and south of France.

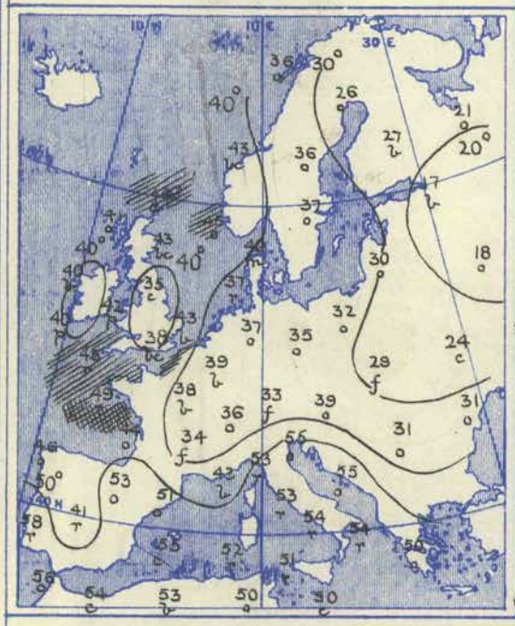
Temperature fallen generally but risen in Scotland and the west of Norway, as well as in Italy, the Netherlands, and western and southern Germany. Morning readings highest, 58° at Algiers, 57° at La Calle, and 55° at Oran and Malta; slightly above 50° at many of the Mediterranean stations. Lowest, 17° at Kharkov, 23° at Hermanstadt, and 24° at Kiev; below the freezing point over nearly the whole of Russia, and very little above it in central Scotland. Rising during day to 45° and upwards in most parts of the United Kingdom, and to 49° at Jersey; exceeding 55° over southern Europe, and reaching 68° at Palermo.

Wind moderate to strong from the Westward on our western and southern coasts; light to moderate from the South-Westward over France, the Netherlands, and the eastern parts of Great Britain; South-Easterly in the north of Scotland and over northern, eastern and central Europe generally; variable in the southern countries. Subsequently backing to the South-Westward in the west and south of our Islands; no decided change occurring elsewhere.

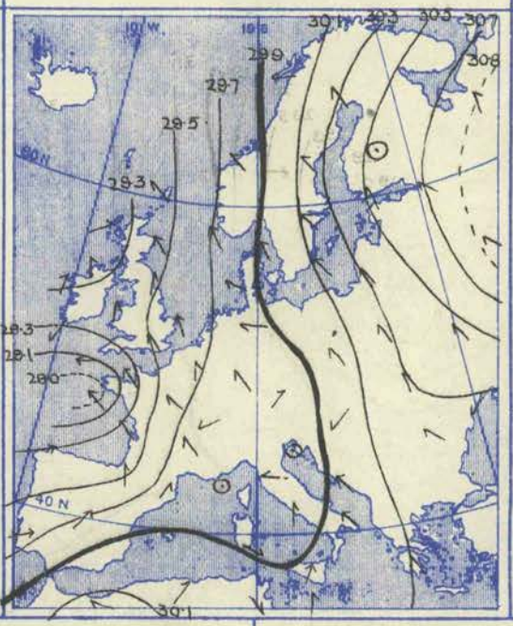
Barometer highest, 30·7 ins. and upwards over northern Russia; 30·1 ins. and upwards in an anticyclone covering the whole of Russia and the neighbouring provinces. Lowest, 29·0 ins. and less in a shallow depression with its centre over the north-east of Scotland; 29·7 ins. and less in another disturbance over the Balearic Islands. Depression over Scotland subsequently travelling away to the northward; Mediterranean disturbance moving north-eastwards to the neighbourhood of the Riviera.

Saturday, 12th December, 1903.

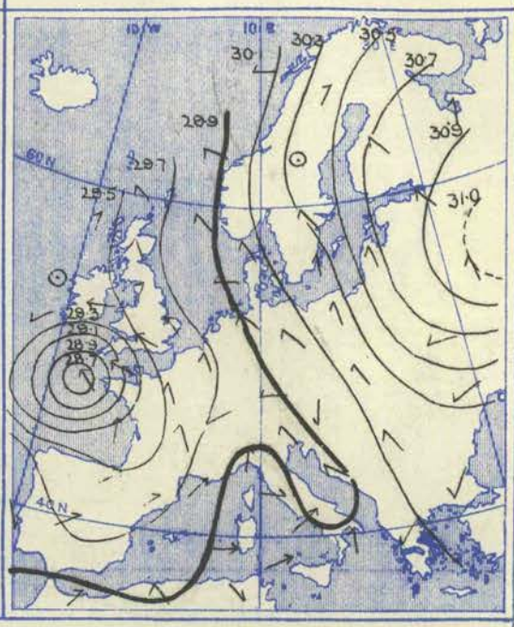
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning varying a good deal, even locally, from cloudless to overcast, with mist or fog here and there, rain in the south-west of England and north-west of France, in Spain and Portugal, Italy, Sardinia, and Sicily, and in Denmark. During the day the weather was dry over Russia, Germany, Austria, the Low Countries, and Algeria, rain falling in most other countries, considerable amounts in many places, ranging up to 0·8 in. at Bath and Lorient, and 1·1 ins at Madrid.

Temperature changed irregularly, risen decidedly over south-western and south-eastern Europe, fallen as decidedly in some other regions. The morning values highest, 58° at Lisbon, 56° at San Fernando, and 55° at Lésina and Trieste, 50° at Lorient, and 48° at Dungeness. Lowest, 17° at St. Petersburg, 18° at Moscow, 19° at Charkow, 33° at Munich, 32° at Perpignan, and 31° at Nottingham. Rising during the day to 45° and upwards in many parts of the United Kingdom, and to 49° at Jersey, exceeding 55° over southern Europe and reaching 63° at Brindisi and Palermo.

Wind at 8 a.m. mainly South-Easterly over the greater part of the area under observation, but South-Westerly to Southerly over south-western Europe and the western basin of the Mediterranean, and over the north-western portion of the British Isles. Strong to a gale in force on our southern coasts, and thence down to Portugal, mostly moderate or light elsewhere, with calms in several localities. Blowing a strong gale during the day on the English Channel and the Bay of Biscay, and some increase in the wind spreading northward over Britain. Elsewhere not much change noted in direction or force.

Barometer at 8 a.m. falling rapidly in Brittany, to below 29 ins. off Brest, near the centre of a deep cyclonic system. Below 29·3 ins. on our north-western coasts in a depression passing out to the Atlantic. Eastern Europe covered by the western half of an anticyclone in which the barometer ranged upwards to 30·8 ins. at Archangel and 30·9 ins. at Moscow. By evening the depression on the Bay of Biscay growing deeper, the barometer declining below 28·7 ins. at Brest, but the eastern anticyclone undergoing no material modification.

IV.—GENERAL NOTES, etc.

During the whole of this week an anticyclone of increasing intensity lay over Russia (the readings of the barometer on Saturday being above 30·8 ins. over the northern and central parts of that country), and until very nearly the close of the period another high pressure system extended from the Atlantic over Spain and Algeria. In the western, central and southern parts of Europe, the weather was influenced by cyclonic systems, and was consequently very changeable. Over our Islands and their immediate neighbourhood the depressions, which advanced from the Atlantic, were large and rather deep, Southerly to Westerly gales being experienced on many parts of our western and southern coasts, with frequent rain in all parts of the Kingdom. In the southern countries the weather was affected early in the week by a depression which appeared originally over the Gulf of Genoa, and which afterwards moved south-eastwards across Italy and gradually filled up, the disturbance being accompanied by considerable falls of rain in the regions over which it passed.

Early on Saturday a deep cyclonic system appeared suddenly over the northern part of the Bay of Biscay, and later in the day its centre moved slowly north-eastwards over the western part of the Channel. During the progress of this depression the wind blew a severe gale over the Channel and Bay of Biscay, from the South-East in the former region, and from the South-West or West in the latter, while rain fell heavily at many places in the western parts of England and France.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 290.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	5·9	− 0·5	14	− 1
STRATHPEFFER SPA	5·0	− 2·6	11	− 6
EDINBURGH	4·1	− 1·7	9	− 4
COCKLE PARK	4·8	—	10	—
NEWCASTLE-ON-TYNE	0·5	—	1	—
YORK	0·4	− 6·0	1	− 12
CROMER	4·1	—	8	—
LOWESTOFT	2·7	—	5	—
DUNMOW	0·7	—	1	—
SHEFFIELD	4·7	—	9	—
WORKSOP	1·1	− 6·4	2	− 12
THURCASTON	3·0	− 4·6	6	− 9
TUNBRIDGE WELLS	2·2	—	4	—
MARGATE	2·6	− 8·6	5	− 16
BROADSTAIRS	—	—	—	—
RAMSGATE	—	—	—	—
EASTBOURNE	2·7	− 10·1	5	− 18
BRIGHTON	1·4	− 11·1	3	− 20
WORTHING	2·7	—	5	—
BOGNOR	9·9†	—	18†	—
WATERGATE PARK	6·1	—	11	—
WESTBOURNE	12·9†	+ 0·8	24†	+ 2
VENTNOR HOSPITAL	9·5	− 2·4	17	− 4
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	4·5	− 4·5	8	− 8
SOUTHPORT	4·4	—	9	—
RHYL	10·5	—	20	—
ABERDOVEY	12·6†	—	24†	—
TENBY	—	—	—	—
TORQUAY	19·3	+ 6·9	35	+ 13
NEWQUAY	10·5	− 2·1	19	− 4
GUERNSEY	9·8†	− 1·2	18†	− 2

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX. No. 46 p. 272. ..	Sumburgh Head	—	—	—	—	—	—	—	—	—	2·07	+ 1·11	—	—	—	—
" " "	Jersey	—	—	—	—	—	—	—	—	6	0·61	− 0·33	—	—	—	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. NO. 50.] *Third Series.* WEEK ENDING SATURDAY, DECEMBER 19TH, 1903. [*Price 6d.* *Annual Subscription post paid £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 296.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	47	21	42·2	34·2	38·4	0 (average)	1	− 6	29	− 1	1892	−122	691	− 48
	1. SCOTLAND, EAST	49	21	40·8	32·5	36·8	0 (average)	0	− 7	36	− 1	2140	−224	749	− 81
	2. ENGLAND, N.E.	47	28	43·9	35·4	39·8	1 above	5	− 4	25	− 6	2562*	− 27	506*	−146
	3. ENGLAND, EAST	50	29	44·1	37·6	41·0	2 above	6	− 4	18	17	3086	+ 85	461	−256
	4. MIDLAND COUNTIES	48	27	42·6	35·7	39·3	1 above	2	− 8	24	12	2823	−122	529	−220
	5. ENGLAND, SOUTH	50	34	45·8	39·9	43·0	3 above	16	+ 1	6	−19	3308	− 20	298	−218
Principal Grazing Districts.	6. SCOTLAND, WEST	48	28	43·6	35·9	39·9	0 (average)	4	− 9	24	+ 1	2476	− 69	45*	−101
	7. ENGLAND, N.W.	47	26	43·5	36·7	40·2	0 (average)	4	− 9	20	− 4	2767	− 30	383	−130
	8. ENGLAND, S.W.	51	33	46·8	40·7	43·9	2 above	19	− 2	4	−13	3231	+ 86	226	−162
	9. IRELAND, NORTH	50	29	45·0	37·5	41·4	1 above	8	− 7	19	− 3	2569	−125	398	− 83
	10. IRELAND, SOUTH	53	30	47·5	38·7	43·3	1 above	23	0	9	− 7	3098	+ 1	279	− 72
	— CHANNEL ISLANDS	52	41	49·5	44·4	47·1	1 above	36	+ 3	0	− 4	3833	+101	59	− 76

Rainfall.

	DISTRICTS. (See p. 296.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	4	10 less	253	+35	65·3	+17·4
	1. SCOTLAND, EAST	5	5	2 less	226	+38	38·8	+ 8·6
	2. ENGLAND, N.E.	3	3	3 less	191	+17	30·9	+ 6·3
	3. ENGLAND, EAST	2	less than half	5 less	174	− 1	29·7	+ 6·2
	4. MIDLAND COUNTIES	4	2	4 less	188	+21	34·5	+ 7·9
	5. ENGLAND, SOUTH	4	2	4 less	193	+30	36·2	+ 9·0
Principal Grazing Districts.	6. SCOTLAND, WEST	5	5	9 less	237	+41	65·7	+17·3
	7. ENGLAND, N.W.	5	3	5 less	223	+38	44·1	+10·5
	8. ENGLAND, S.W.	6	11	2 more	216	+28	48·7	+11·1
	9. IRELAND, NORTH	6	5	4 less	258	+37	46·4	+11·2
	10. IRELAND, SOUTH	6	9	2 less	235	+36	47·3	+ 8·3
	— CHANNEL ISLANDS	6	8	1 less	234	+41	38·1	+ 6·3

Bright Sunshine.

	DISTRICTS. (See p. 296.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	− 2	5	− 5	1024	− 85	24	− 2
	1. SCOTLAND, EAST	0	− 7	0	−15	1163	−120	27	− 3
	2. ENGLAND, N.E.	1	− 8	3	−15	1270	− 94	29	− 2
	3. ENGLAND, EAST	5	− 3	10	− 6	1435	−129	33	− 3
	4. MIDLAND COUNTIES	3	− 4	6	− 7	1258	− 89	29	− 2
	5. ENGLAND, SOUTH	4	− 6	7	−12	1522	− 55	35	− 1
Principal Grazing Districts.	6. SCOTLAND, WEST	4	− 4	8	− 8	1285	− 40	30	− 1
	7. ENGLAND, N.W.	4	− 4	8	− 7	1378	+ 60	32	+ 1
	8. ENGLAND, S.W.	2	− 9	3	−17	1506	−105	35	− 2
	9. IRELAND, NORTH	4	− 4	7	− 9	1170	− 80	27	− 2
	10. IRELAND, SOUTH	4	− 6	8	−12	1318	−115	31	−
	— CHANNEL ISLANDS	3	−10	5	−17	1741	−121	41	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather. During the greater part of the week the conditions were mild, dull, and misty, but very little rain fell over the Kingdom as a whole, especially in the eastern, central and southern parts of England.

Temperature was above the mean in most districts, but only just equal to it in Scotland and England N.W. The highest of the maxima were registered on the 14th, when they ranged from 53° in Ireland S. to 47° in Scotland N., England N.E., and England N.W. The lowest of the minima, which were recorded on irregular dates, ranged from 21° in Scotland E. and N., and less than 30° in most other districts, to 33° in England S.W., 34° in England S., and to 41° in the Channel Islands.

Rainfall exceeded the mean in England S.W., but was deficient in all other parts of the Kingdom. In England E. the fall was scarcely appreciable.

Bright Sunshine was much less than the normal in all districts. The highest percentage of the possible duration was only 10 in England E., in England N.E. and S.W. it was no more than 3, while in Scotland E. there was no measureable quantity.

Barometer and Wind. During the whole of this period the barometer was highest in an extensive anticyclone stretching from the eastward to Scandinavia and the Baltic, and generally lowest over or off our south-western districts. At the commencement of the week a deep and well-defined depression lay over the south-western counties of England, causing strong winds or gales from between South-East and East or North-East over the United Kingdom, and strong Westerly gales on the west coast of France. As this disturbance disappeared the gradients became less steep, and the wind subsided very generally. No other low pressure systems came quite within our area of observation, although other systems off our south-west coasts towards the end of the week caused the South-Easterly and Easterly wind to again increase in force.

2101r. Wy. & S. Ltd.
370 12 | 03

II.—DATA from which the SUMMARY on page 295 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	46	36	43·6	39·9	41·8	+ 2·2	4	9	7	0·77	− 0·25	*	*	*	*
	Stornoway	46	30	43·6	33·9	38·9	− 0·5	4	31	4	0·45	− 0·82	0·8	− 4·5	2	− 10
	Wick	47	25	44·9	36·3	40·8	+ 2·5	8	23	4	0·38	− 0·32	*	*	*	*
	Lairg Ꞩ	43	21	37·4	40·4	34·0	− 0·8	0	56	2	0·34	− 0·56	*	*	*	*
	Glencarron Ꞩ	44	27	40·3	31·3	36·0	− 0·9	0	42	3	0·29	− 1·99	*	*	*	*
	Fort Augustus Ꞩ	45	26	41·8	31·8	37·0	− 1·2	0	35	5	0·14	− 1·06	7·0	+ 5·0	16	+ 11
	Fort William	47	30	44·0	35·7	40·0	+ 0·4	6	25	5	0·29	− 1·97	0·0	− 2·6	0	− 6
1. SCOTLAND, E.	Nairn	43	22	39·1	30·6	35·0	− 2·7	0	49	2	0·16	− 0·32	*	*	*	*
	Aberdeen	46	29	42·9	37·1	40·1	+ 2·2	3	18	5	0·76	+ 0·04	0·0	− 8·6	0	− 19
	Braemar Ꞩ	41	21	37·4	29·0	33·4	− 0·8	0	60	6	0·76	+ 0·01	*	*	*	*
	Ochtertyre Ꞩ	44	26	41·1	32·3	36·9	− 0·3	0	36	7	0·63	− 0·37	*	*	*	*
	Leith	49	30	43·9	34·0	39·2	− 0·2	5	31	4	0·23	− 0·21	*	*	*	*
	Marchmont Ꞩ	44	27	40·3	31·9	36·3	− 0·4	0	40	5	0·45	− 0·25	0·0	− 7·2	0	− 15
2. ENGLAND, N.E.	Alnwick Castle	46	28	43·2	33·6	38·6	+ 0·2	3	32	5	0·91	+ 0·23	*	*	*	*
	Durham	45	28	41·3	34·6	38·1	+ 0·4	0	27	1	0·05	− 0·54	0·0	− 9·5	0	− 19
	Shields	46	33	44·0	36·0	40·2	+ 1·0	6	24	4	0·37	− 0·16	*	*	*	*
	Scarborough 𝔐	46	29	44·7	33·9	39·5	+ 0·4	8	32	4	0·10	− 0·52	1·9	—	4	—
	Spurn Head	46	33	44·1	37·7	41·0	+ 1·4	6	17	1	0·01	− 0·45	*	*	*	*
	Fulbeck (Lincolnshire)	47	33	45·9	36·6	41·4	+ 4·1	11	23	3	0·04	− 0·40	4·5	—	9	—
3. ENGLAND, E.	Hillington 𝔐	47	29	43·8	34·8	39·5	+ 1·8	5	28	4	0·09	− 0·46	8·0	− 1·3	15	− 3
	Yarmouth	46	39	43·6	40·0	41·9	+ 3·4	4	9	1	0·01	− 0·54	*	*	*	*
	Geldeston	50	32	44·7	36·1	40·6	+ 1·9	8	24	1	0·01	− 0·47	7·4	− 3·5	14	− 7
	Cambridge	49	32	45·0	35·5	40·4	+ 2·4	8	26	2	0·10	− 0·30	3·9	− 5·2	7	− 10
	Felixstowe	46	38	45·0	40·5	42·8	+ 3·5	12	4	0	0·00	—	9·0†	—	17†	—
	Rothamsted	48	32	43·0	35·9	39·6	+ 1·5	3	23	2	0·06	− 0·49	5·8	− 3·8	11	− 7
	Shoeburyness	47	39	43·7	40·1	42·0	+ 2·4	5	5	1	0·01	− 0·39	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	44	29	40·4	33·9	37·3	− 0·1	0	33	3	0·16	− 0·54	0·2	—	0	—
	Bawtry (Hesley Hall)	46	27	42·0	32·3	37·3	− 0·5	0	33	4	0·10	− 0·37	*	*	*	*
	Nottingham	47	30	42·7	35·7	39·3	+ 0·9	2	23	3	0·12	− 0·40	3·9	—	8	—
	Loughborough	48	31	43·4	35·9	39·8	+ 1·4	4	23	4	0·13	− 0·40	*	*	*	*
	Colly Weston (Stamford)	47	31	42·9	34·7	39·0	+ 1·4	3	28	4	0·06	− 0·41	*	*	*	*
	Cheadle 𝔐	45	31	40·7	34·9	37·9	+ 0·7	0	29	5	0·41	− 0·31	*	*	*	*
	Birmingham (Edgbaston)	46	36	42·6	37·9	40·3	+ 1·5	2	15	3	0·25	− 0·26	2·7	—	5	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford 𝔐	46	30	43·0	37·0	40·1	+ 1·2	3	19	5	0·51	− 0·04	*	*	*	*
	Cirencester	47	32	44·1	35·5	40·0	+ 2·0	6	26	2	0·23	− 0·41	3·8	− 5·4	7	− 10
	Oxford	48	37	44·6	39·1	42·0	+ 3·0	7	8	2	0·05	− 0·43	4·3	− 5·0	8	− 9
5. ENGLAND, S.	London	50	37	45·9	38·3	42·3	+ 2·6	18	10	2	0·04	− 0·45	1·8↓	− 2·9↓	3↓	− 6↓
	Swarraton (Alresford) 𝔐	47	34	43·7	36·0	40·0	+ 1·8	5	23	2	0·48	− 0·22	*	*	*	*
	Dungeness	50	38	46·0	40·9	43·6	+ 2·6	16	3	3	0·06	− 0·42	3·8	—	7	—
	Hastings (St. Leonards)	50	37	46·7	40·9	43·9	+ 2·8	18	3	4	0·14	− 0·53	3·5	− 9·6	7	− 18
	Southampton	49	39	47·1	40·9	44·1	+ 3·2	19	3	3	0·15	− 0·56	2·4	− 8·7	4	− 16
	Portland Bill	50	42	48·0	43·7	45·9	+ 3·3	27	0	6	0·16	—	*	*	*	*
	Shaftesbury 𝔐	46	36	43·4	38·4	41·0	+ 3·5	4	14	5	0·38	− 0·34	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	47	32	45·5	36·6	41·2	+ 0·5	10	22	4	0·42	− 1·73	*	*	*	*
	Glasgow	46	29	41·4	34·9	38·3	− 0·6	0	26	5	0·49	− 0·46	0·0	− 3·7	0	− 8
	Cally Ꞩ	46	28	42·5	35·3	39·0	+ 0·2	1	25	5	0·57	− 0·63	*	*	*	*
	Aspatria	47	31	43·4	34·8	39·3	− 0·6	4	28	2	0·12	—	7·0	—	14	—
	Douglas (Isle of Man)	48	31	45·4	37·9	41·8	+ 0·1	10	18	7	0·86	− 0·20	4·5	− 4·2	9	− 8
7. ENGLAND, N.W.	Newton Rigg	44	26	41·2	32·7	37·1	− 2·6	0	34	4	0·34	—	3·6	—	7	—
	Stonyhurst	44	33	41·9	37·0	39·6	+ 1·2	0	17	4	0·24	− 0·35	0·5	− 5·2	1	− 10
	Blackpool 𝔐	46	31	43·4	34·0	38·9	− 0·7	4	30	4	0·20	− 0·53	2·4	− 3·2	5	− 6
	Manchester (Prestwich)	46	33	42·8	36·2	39·6	+ 1·0	2	22	3	0·16	− 0·69	2·9	—	6	—
	Liverpool Obsy. (Bidston)	45	32	42·7	36·7	39·8	− 0·6	2	20	6	0·44	− 0·16	4·4	—	9	—
	Chester (Hawarden Bridge)	47	35	44·0	38·1	41·2	0·0	6	16	4	0·67	—	*	*	*	*
	Llandudno 𝔐	47	37	45·2	39·4	42·4	+ 0·1	14	7	5	0·24	− 0·45	5·9	− 2·0	12	− 4
	Holyhead	47	35	45·0	39·3	42·3	− 1·1	13	8	7	0·39	− 0·50	*	*	*	*
	Bettws-y-Coed	47	33	45·0	37·0	41·2	− 0·9	8	21	5	0·28	—	3·2	—	6	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	49	40	46·6	42·1	44·4	0·0	17	0	6	0·96	+ 0·02	0·0	− 10·0	0	− 19
	Clifton	48	39	45·2	40·3	42·9	+ 2·9	13	5	5	0·61	− 0·15	*	*	*	*
	Bath	49	38	46·1	39·4	42·9	+ 3·0	17	7	2	0·14	− 0·53	2·8	—	5	—
	Arlington (N. Devon)	47	35	45·4	37·4	41·6	+ 1·1	10	20	6	0·89	− 0·50	*	*	*	*
	Cullompton 𝔐	48	33	46·6	39·1	43·0	+ 3·4	19	8	7	0·74	− 0·11	0·0	− 8·6	0	− 16
	Falmouth	51	38	49·1	44·3	46·8	+ 2·1	34	0	6	2·92	+ 1·65	3·0	− 9·6	6	− 17
	Plymouth	50	37	48·9	42·6	45·9	+ 2·7	27	0	7	1·60	+ 0·65	0·8	− 10·8	2	− 20
9. IRELAND, N.	Malin Head	46	33	44·7	38·0	41·5	− 0·4	8	17	5	0·22	− 0·54	*	*	*	*
	Edenfel (Omagh)	46	30	43·0	35·7	39·5	+ 1·6	3	24	7	0·67	− 0·19	*	*	*	*
	Blacksod Point	50	34	46·6	39·3	43·1	− 0·2	19	8	7	0·54	− 0·84	*	*	*	*
	Markree Castle	50	33	45·6	37·1	41·5	+ 1·9	10	21	5	0·37	− 0·59	1·9	− 5·8	4	− 12
	Armagh	47	29	44·5	36·9	40·9	+ 2·0	7	21	6	0·47	− 0·19	5·4	− 2·9	11	− 6
	Donaghadee	47	33	45·7	38·1	42·1	+ 0·7	17	11	7	0·83	+ 0·16	*	*	*	*
10. IRELAND, S.	Dublin	49	37	46·9	40·6	43·9	+ 2·2	19	4	6	0·43	− 0·11	5·3	− 6·8	10	− 13
	Birr Castle	53	32	47·0	35·7	41·6	+ 1·7	14	27	4	0·19	− 0·54	1·2	− 9·0	2	− 17
	Kilkenny	50	30	46·1	35·6	41·1	+ 0·2	11	27	5	0·82	+ 0·06	*	*	*	*
	Waterford	50	34	47·6	40·4	44·1	+ 2·6	21	4	5	2·04	+ 1·02	*	*	*	*
	Roche's Point	50	35	48·0	40·4	44·4	− 0·1	24	4	7	1·40	+ 0·26	*	*	*	*
	Valencia	53	37	50·0	40·6	45·5	0·0	30	4	7	0·75	− 0·69	6·2	− 3·4	12	− 6
	Killarney	52	35	46·9	38·7	43·0	− 0·7	21	9	7	0·96	− 0·70	*	*	*	*
	Foynes	50	34	47·1	37·7	42·6	+ 0·4	22	12	4	0·43	− 0·62	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	52	43	51·0	45·7	48·5	+ 1·1	46	0	7	1·44	+ 0·49	2·8	− 10·4	5	− 19
	Jersey	50	41	47·9	43·0	45·6	+ 1·4	25	0	5	0·29	− 0·67	4·7	− 9·5	8	− 17

Stations Marked 𝔐 are in connection with the Royal Meteorological Society, and those marked Ꞩ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

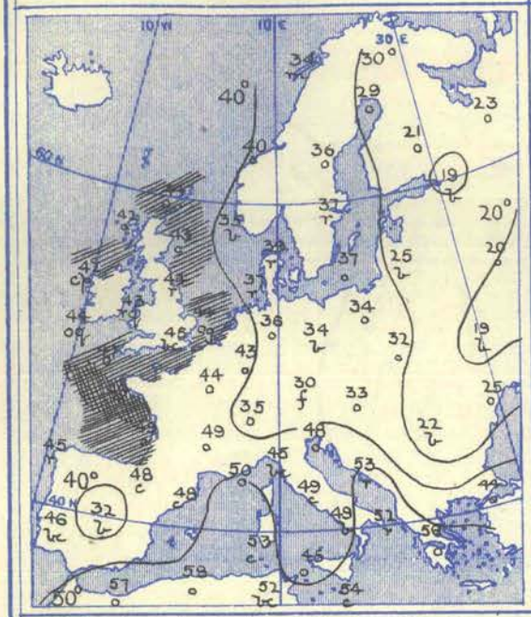
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

↓ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

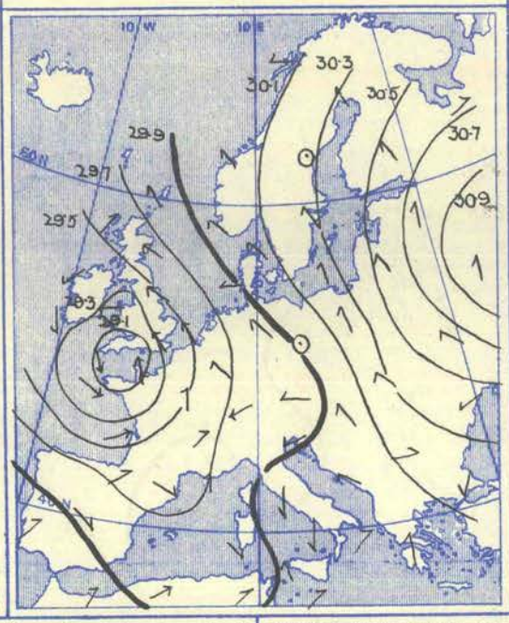
Note.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 13th December, 1903.

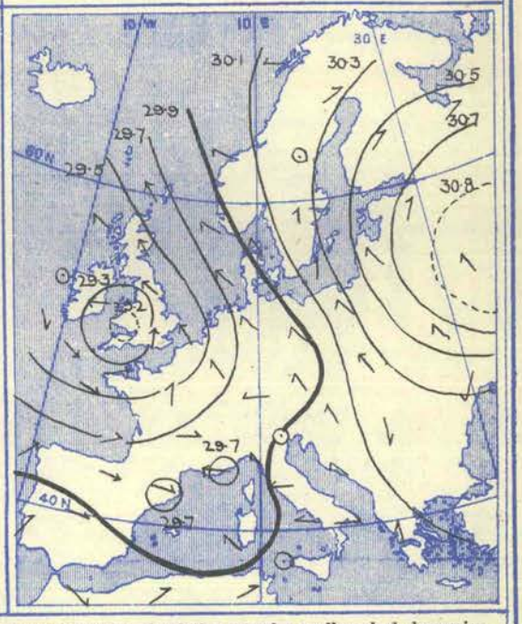
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning cloudy or dull in all but the southern countries, with rain in many parts of the United Kingdom, and also in Denmark and at Stockholm, Perpignan and Brindisi. Rain falling later in nearly all parts of western and southern Europe—heavily over the south of France and northern Italy (amount measured next morning as large as 2·3 ins. at Marseilles).

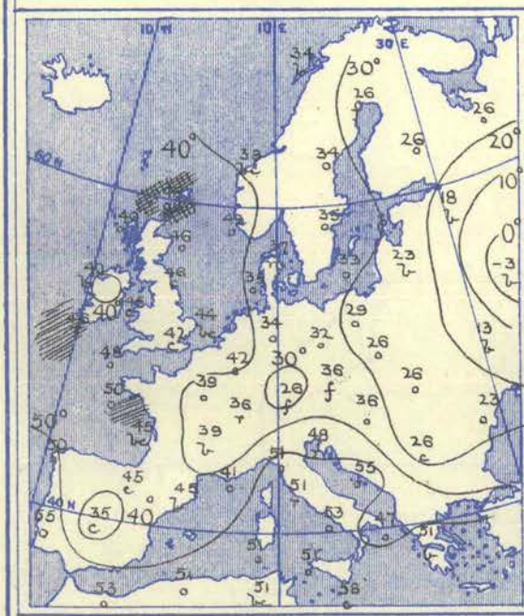
Temperature risen in the United Kingdom and France, fallen in most other countries. Morning readings highest, 58° at Algiers, 57° at Oran, 56° at Athens, and 55° at Nemours; above 50° at most of the Mediterranean and Adriatic stations, and above 45° over the English Channel and the Bay of Biscay. Lowest, 12° at Kharkov, 19° at Kiev and St. Petersburg, and 20° at Moscow; below the freezing point over nearly the whole of Russia, Austria, and south Germany; lowest in our Islands, 38° at Parsonstown. Rising during day to 45° and upwards in nearly all parts of the United Kingdom, and to 50° at some of the Channel stations; exceeding 50° in the west and south of France, and exceeding 60° over southern Italy, the highest reading reported being 67° at Palermo.

Wind in these Islands and France showing circulation round a well-marked depression with its centre over the western parts of the Channel; South-Easterly gales blowing on our own southern coasts, and North-Westerly gales in the Scilly Islands and the north-west of France. South-Easterly winds reported over the northern and central parts of the Continent, but variable breezes in the southern countries. Gales subsiding later, and wind veering to the South-Westward at the English Channel stations; no important change occurring elsewhere.

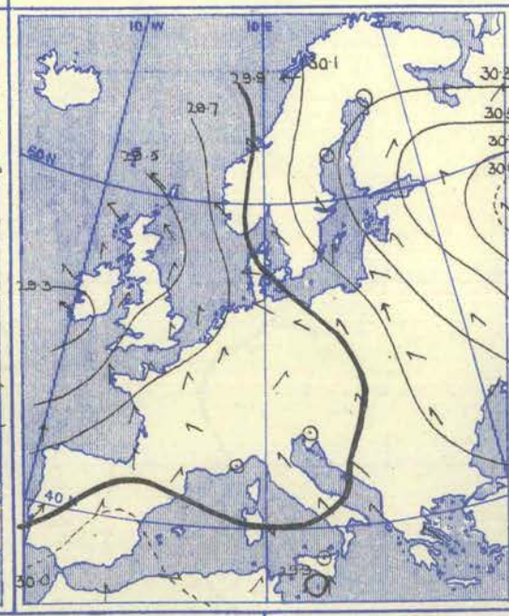
Barometer highest, 30·98 ins. at Moscow; 30·1 ins. and upwards in an anticyclone lying over the whole of Russia and Sweden and the neighbouring parts of Germany and Austria. Lowest, 29·0 ins. and less in a rather deep depression with its centre near Plymouth; 29·9 ins. and less in a shallow disturbance over the southern part of the Adriatic and the neighbouring provinces. Channel depression subsequently advancing slowly north-eastwards over England, but partially filling up; barometer rising in the southern parts of the United Kingdom, but falling in the north.

Monday, 14th December, 1903.

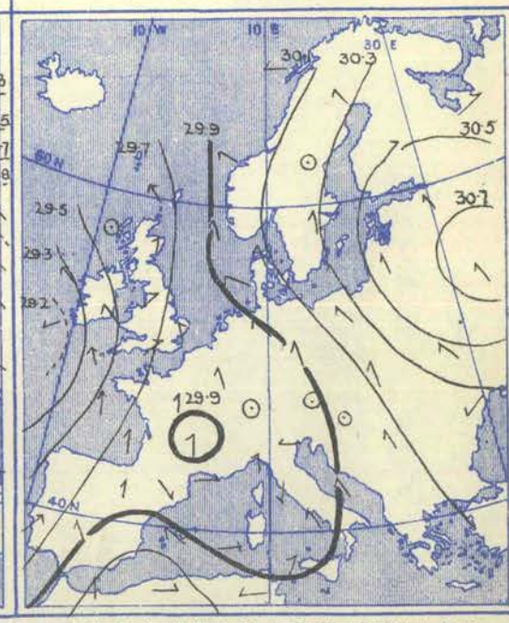
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair to fine in many parts of our Islands and Russia, but dull, overcast skies prevailing generally, with a misty atmosphere on various parts of our own coasts, fog at Munich, Prague, and Haparanda, and rain at a few scattered stations at home and on the Continent. Rain falling subsequently at nearly all our western and northern stations, and at many Continental ones, snow at Kiev. The amounts in most instances very small, but 1·1 ins. measured at Naples, 1·4 ins. at Lésina, and 1·5 ins. at Lisbon.

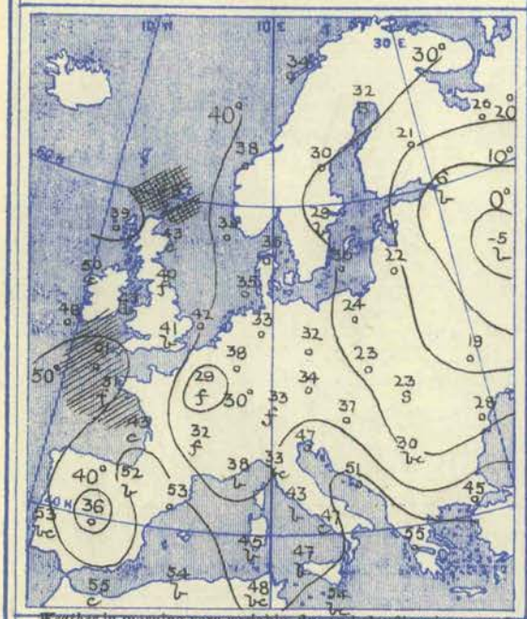
Temperature at 8 a.m. changed irregularly, fallen briskly over inland and southern France and central Russia. Readings highest, 58° at Malta, 55° at Lésina and Lisbon, and 53° at Naples and Oran; 48° at Dungeness and Scilly, and 47° at Pembroke and Roche's Point. Lowest, 34° at Parsonstown, freezing generally over Russia and eastern Germany, 20° at Memel, 18° at St. Petersburg, 13° at Kiev, 10° at Kharkov, and −3° at Moscow. Rising during the day to 68° at Biskra, 64° at Malta and Nemours, 63° at Oran, and 61° at Algiers and Patras; to 53° at Parsonstown and Valencia, and 50° at Blacksod Point, Roche's Point, and in London; to 25° at St. Petersburg, 23° at Lemberg, and 21° at Memel.

Wind over south-western Europe and Algeria South-Westerly to Southerly, light to fresh; over the rest of our area mainly from between South and East, strong to a moderate gale on our south-western coasts, fresh or strong on the upper portion of the North Sea, moderate to very light in most other localities. No important alteration in the direction taking place during the day, but fresh breezes to moderate gales spreading over the south-western half of the United Kingdom, and a strong breeze blowing over Portugal and in Sardinia.

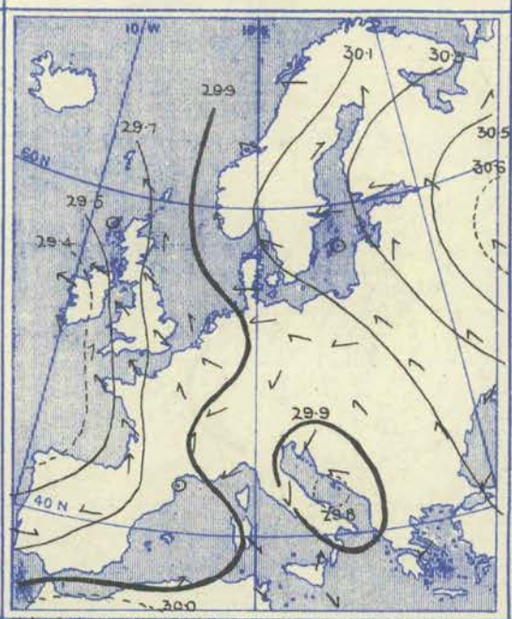
Barometer at 8 a.m. highest in an anticyclone occupying the eastern half of Europe, the centre lying near Moscow, with the mercury at 30·83 ins.; relatively high, above 30 ins. over north Africa and southern Spain. Lowest, below 29·25 ins. in a depression centred outside our south-western coasts. No important change occurring later, the anticyclone over Russia decreasing slightly, 30·75 ins., and the south-western disturbance deepening very slowly.

Tuesday, 15th December, 1903.

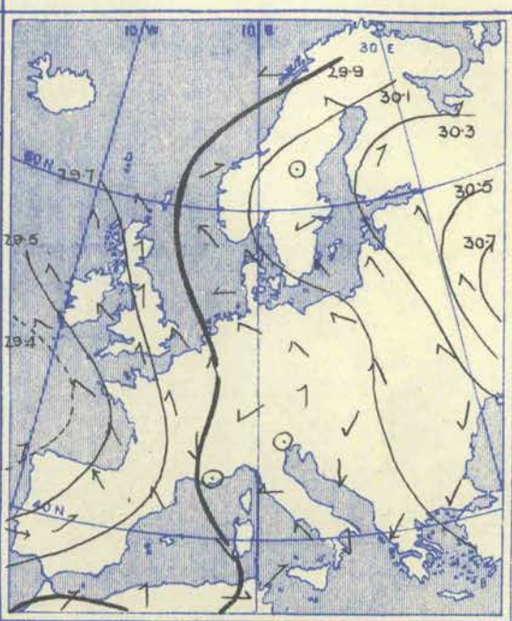
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning very variable, fine and cloudless in many localities but generally dull and overcast, with rain in Wales and the east of Ireland and at Nicolaieff, and snow at Haparanda, Memel, and Lemberg. Mist in various parts of our Islands and fog on the north-east coast of England and at several stations from the coast of Brittany eastward into Bavaria and north Italy. Rain falling later at all our western stations, over the west and south of France, and at some scattered stations elsewhere, a little snow at Kiev. Largest rainfalls, 0·5 in. at Madrid, and 0·8 in. at St. Matthieu and Sicié.

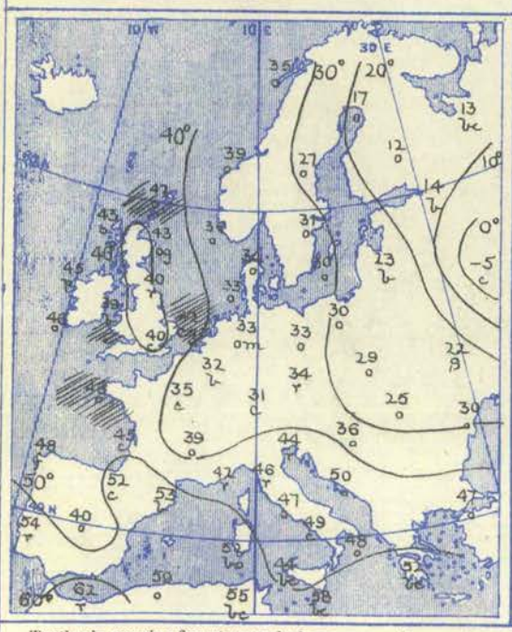
Temperature at 8 a.m. changed very irregularly, from a rise of 16° at Parsonstown to a fall of 18° at Leghorn. Readings highest, 55° at Patras and Nemours, and 54° at Malta and Algiers, 50° at Blacksod Point and Parsonstown, and 51° at Scilly and Brest. Lowest, 34° at Nairn, 33° at Leghorn, 32° at Limoges, Lyons, and Turin, and 29° at Paris, 15° at Kharkov, 6° at St. Petersburg, and −5° at Moscow. Rising during the day to 63° at Nemours, 66° at Algiers, and Biskra, and 64° at La Calle, Sfax, Oran, and Naples, 57° at Barcelona, 55° at Bilbao and Cap Béarn, 51° at Parsonstown and Valencia, 30° at Swinemünde, 27° at Lemberg and Memel, and 14° at St. Petersburg.

Wind in morning variable in direction round the Mediterranean basin, elsewhere generally from between South and East, moderate or fresh in force in many parts of our Islands and the extreme western and north-western coasts of Europe, mostly light everywhere else. Towards evening increasing to a moderate gale in the north of Ireland, no other important alteration in direction or force being reported.

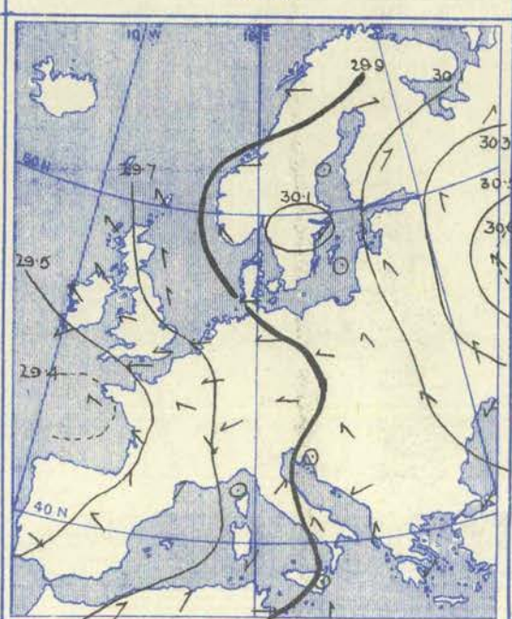
Barometer at 8 a.m. highest in an an anticyclone covering eastern and northern Europe, with its core over central Russia, 30·7 ins. at Moscow. Lowest, below 29·4 ins. in the west of Ireland and thence down the Bay of Biscay to the north-west of Spain, in a depression affecting western Europe generally; 29·8 ins. in a small disturbance on the Adriatic. The latter dispersing afterwards, but the changes in the other systems very slight, their centres remaining almost stationary.

Wednesday, 16th December, 1903.

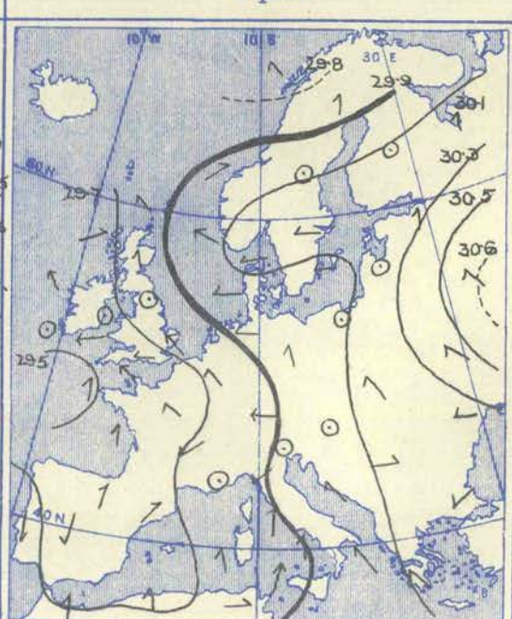
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine at several of our own northern and central stations as well as in Greece and southern Italy. Cloudy or dull elsewhere, with rain at Shields and Roche's Point, and also over the Riviera and northern Italy; snow falling at Kiev. Slight rain falling later in the western and northern parts of the United Kingdom, and considerable amounts over the south of France and northern Italy, more than an inch in several places, and as much as 2·0 ins. at Toulon.

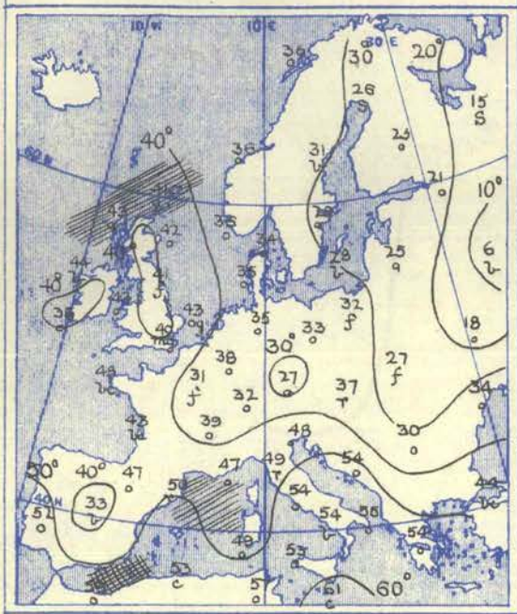
Temperature risen in France and Spain, fallen in most other countries. Morning readings highest, 62° at Nemours, 59° at Algiers and 58° at Malta, above 50° at most of the Mediterranean stations. Lowest, −5° Fahr. at Moscow, +9° at Kharkov, 12° at Kuopio, and 13° at Archangel, below the freezing point over Sweden and Russia generally, and very little above it in central Scotland. Daily maxima below 45° at all our own northern, eastern, and central stations, but thermometer exceeding that level on our southern and extreme western coasts, and reaching 50° at Valencia, exceeding 55° over the southern parts of France and Italy.

Wind Easterly or South-Easterly over the greater part of Europe, light or moderate in force generally but fresh or strong on our own south and east coasts. Chiefly Southerly in Italy, but North-Easterly in Greece. Subsequently shifting to the Northward over the Spanish Peninsula; no important change occurring elsewhere.

Barometer highest 30·6 ins. and upwards over central Russia; 30·1 ins. and upwards in an anticyclone covering the whole of Russia and Turkey. Lowest, 29·4 ins. and less in a depression over the Bay of Biscay. Depression filling up slowly during day and barometer rising slowly in most parts of western Europe; no important change occurring elsewhere.

Thursday, 17th December, 1903.

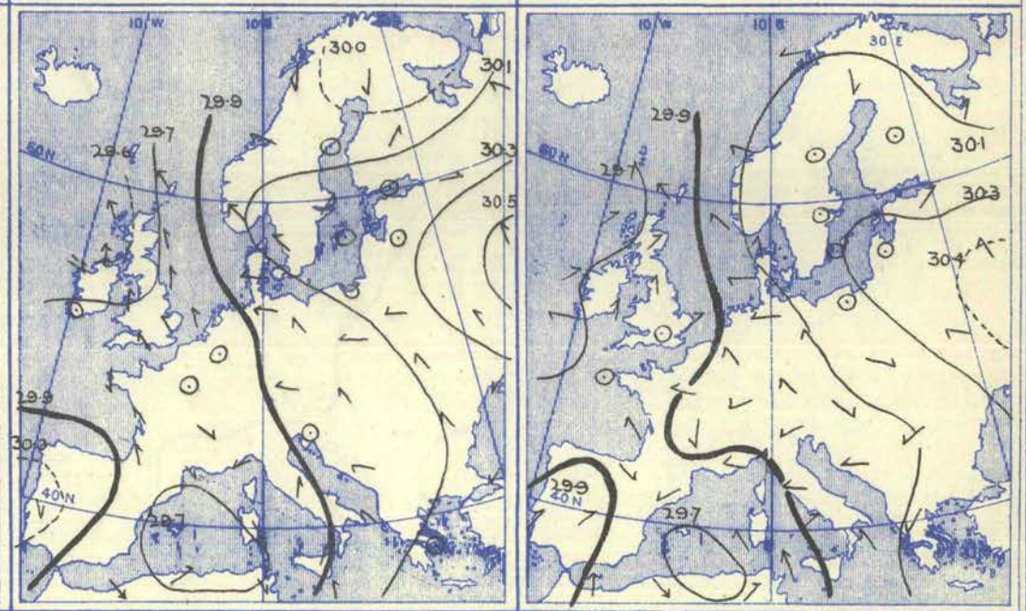
Temperature and Weather. 8 a.m.



Weather in morning clear in several parts of Ireland, central Spain, and south central Russia, generally dull and overcast elsewhere, with rain locally in our Islands, Italy and Austria, and snow at Cracow and in northern Russia. Mist or fog reported at many places in Britain, France, and eastward as far as Lemberg. Rain falling afterwards at most of our own stations and in scattered localities on the Continent, small amounts, as a rule, but as much as 1·1 ins. at Leghorn and 3·6 ins. at Cette. Snow in various parts of eastern Europe.

Temperature at 8 a.m. risen over the Adriatic, Italy, and Tunis, changed irregularly elsewhere. Highest readings, 61° at Malta, 59° at Nemours, and 58° at Oran; 52° at Bilbao and Lisbon; 46° at Dungeness, Jersey, and Portland Bill. Lowest, 34° at Nairn, 33° at Madrid, 31° at Paris and Le Mans, 27° at Belfort; 18° at Kiev, 15° at Archangel, 8° at Kharkov, and 6° at Moscow. Rising in the course of the day to 72° at Sfax, 68° at Biskra, 66° at Palermo, and 65° at Malta; to 57° at Brest, Chassiron, Marseilles, and Croisette; to 48° at Portland Bill and 49° at Valencia and Roche's Point; 30° at Lemberg, Haparanda, and Stockholm, 28° at Munich, and 27° at St. Petersburg.

Barometer and Wind. 8 a.m. 6 p.m.

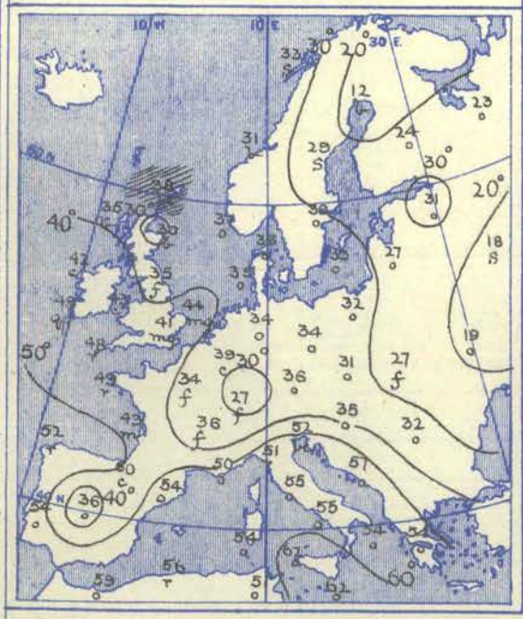


Wind in morning blowing a North-Westerly gale on the western coast of Algeria, and a fresh or strong Southerly to South-Easterly breeze from Malin Head round the north of Scotland and across to Skudesnaes. Elsewhere calms and light to moderate breezes from various directions. Later, the Algerian gale and the wind round our northern coasts moderating, but a strong Southerly breeze springing up in Sicily. No important change in other regions.

Barometer at 8 a.m. highest over eastern Europe, above 30·5 ins. over central Russia. Lowest, below 29·6 ins. off our north-western coasts, and below 29·7 ins. in a depression over the western basin of the Mediterranean. Subsequently the Russian anticyclone diminishing in intensity somewhat, the depression off our north-west coasts passing out to sea, but a new one, with barometer below 29·7 ins., appearing off the south-west of Ireland.

Friday, 18th December, 1903.

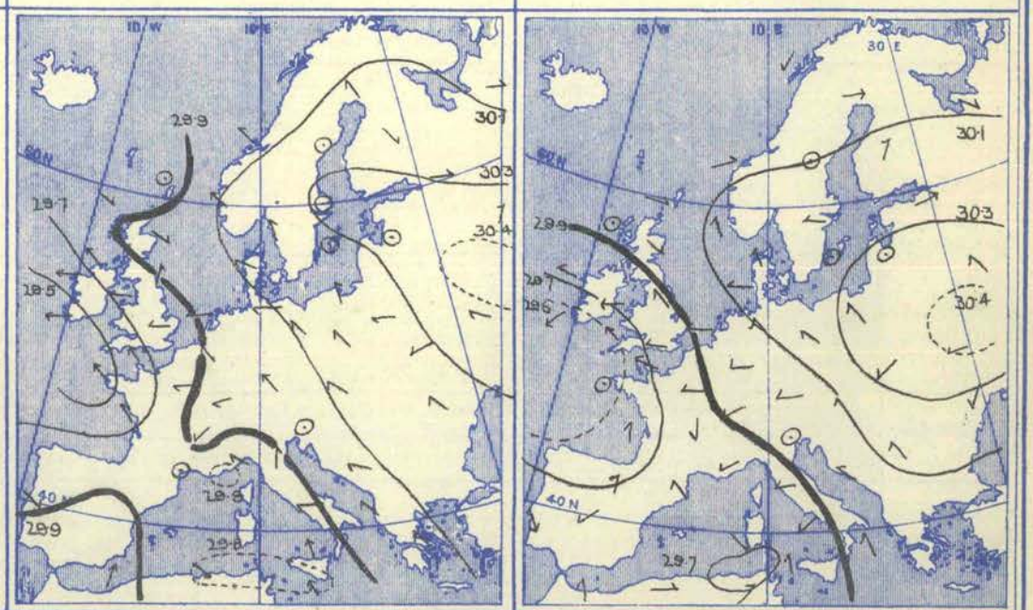
Temperature and Weather. 8 a.m.



Weather in morning fine in the north of Scotland and at Christiansund and Ulcaborg, elsewhere throughout the area under observation dull, with rain at various south-western coast stations between Valencia and Oporto, at Turin, Leghorn and Algiers, and snow at Bodö, Hernösand, and Moscow. Mist or fog at several places in Britain, France, and Austria, at Lésina and Oran. Rain falling later in many parts of our Islands, France, and the Spanish and Italian peninsulas, nearly an inch at Cap Béarn, 0·9 in. at Perpignan and Cagliari, 0·8 in. at Leghorn. Snow at many Russian stations, yielding 0·5 in. of water at Odessa.

Temperature at 8 a.m. risen over nearly the whole area. Highest readings, 62° at Malta and Palermo, 59° at Nemours, 57° at Lésina, and 56° at Algiers; 49° at Roche's Point and 48° at Scilly and Valencia. Lowest, 30° at Aberdeen, 27° at Nairn, Belfort, and Munich, 18° at Moscow, 16° at Kharkov, 15° at Haparanda, and 12° at Ulcaborg. In the course of the day rising to 72° at Sfax, 68° at Biskra, 66° at Oran, 64° at Palermo; and to 30° at Hernösand and Lemberg, 28° at Haparanda, and 19° at St. Petersburg.

Barometer and Wind. 8 a.m. 6 p.m.

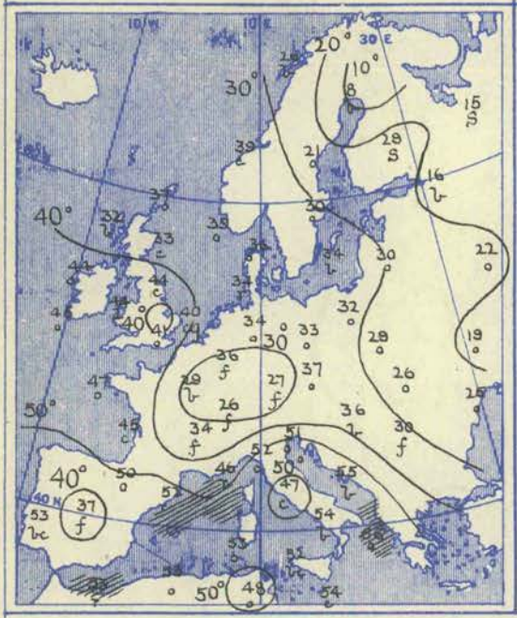


Wind in morning fresh or strong to a gale from South-East or East over the south-west quarter of our Islands and the north-west of France, in the south-west of Norway, and in the Vosges and Bavaria; fresh from North-West at Algiers and Aumale; fresh or strong from South or South-East in Sicily and Malta; calms or light to moderate breezes from various directions in other regions. Still blowing a strong breeze or moderate gale at some of our south and west coast stations and in the Vosges in the evening, but elsewhere the force had moderated.

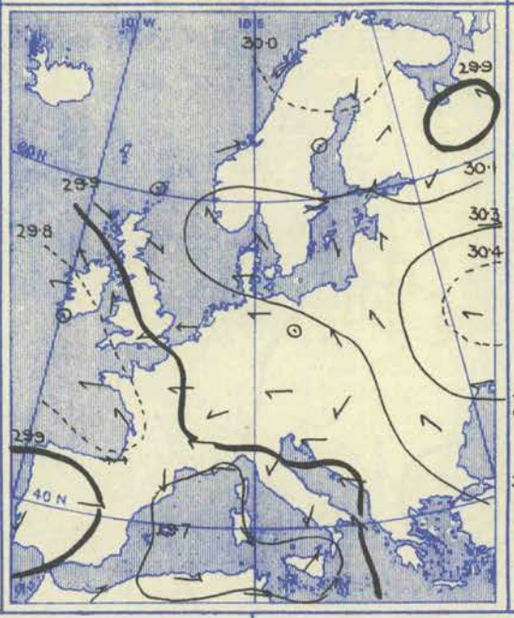
Barometer at 8 a.m. highest in an anticyclone covering eastern Europe, above 30·4 ins. in south central Russia. Lowest, in a depression occupying the greater part of our Islands and France, about 29·4 ins. off our south-western coasts; below 29·8 ins. in a shallow disturbance between Algiers and Malta. No changes of any magnitude occurring during the day, the barometer rising slightly in the Russian anticyclone and the depression on our south-west coasts, falling below 29·7 ins. on the coast of Tunis.

Saturday, 19th December, 1903.

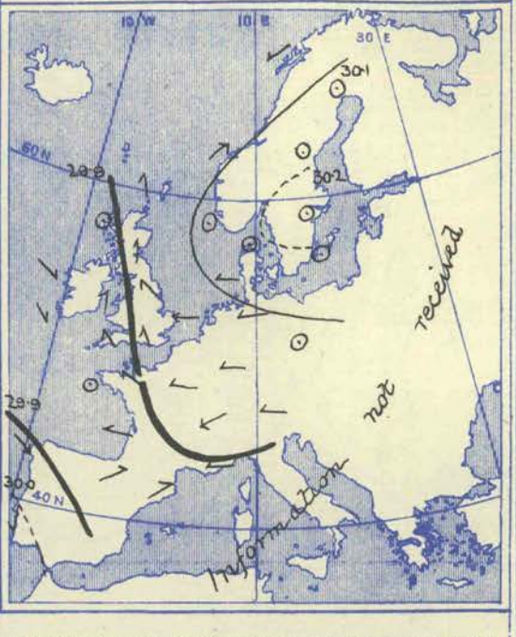
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather at 8 a.m cloudy or overcast very generally, with fog at Roche's Point and some stations in central Europe, Brussels, and Madrid, rain in the south of France, Denmark, at Helsingfors, and in Ireland and Wales, and snow in some northern parts of the Continent and at Swinemünde. Rain falling later in most parts of the United Kingdom and the west of France, and a heavy amount (1·34 ins.) at Perpignan.

Temperature changed irregularly. Morning readings highest, 56° at Brindisi, 55° at Lésina, and 53° at Nemours and Lisbon. Lowest, (1) 4° at Kharkov, (2) 8° at Haparanda, 21° at Hernösand. (3) 28° at Nairn, (4) 26° at Belfort, 27° at Munich, and 37° at Madrid. Rising during day to 57° at Corunna and Nice, to 48° at Parsonstown, and to above 45° at several of our other stations. Severe frost continuing in north of Europe, and thermometer only touching 28° at Munich.

Wind at 8 a.m. showing a light anticyclonic circulation over Europe as a whole, but a cyclonic movement prevailing over the Mediterranean and also over the Bay of Biscay and our south-west coasts. Very little force as a whole, but Easterly wind strong at Cape Sicié, and South-Easterly wind fresh in the north-west of Ireland. Not much change occurring later.

Barometer fallen in most regions, but risen in the most western and south-western parts of Europe and in the south of Russia. Readings at 8 a.m. ranging from 30·4 ins. and upwards in southern Russia, in the central portion of a large anticyclone to 29·9 ins. and less in a depression over the north of Russia, to 29·8 ins. in another system lying over and off our most south-west districts, and to below 29·7 ins. in a shallow system shown over the western half of the Mediterranean. Barometer continuing to rise slowly over England, Ireland, and France during day.

IV.—GENERAL NOTES, etc.

During the whole of this week pressure was highest in a very large anticyclone whose central portion lay over Russia. Very few depressions appeared, but, at the beginning of the week, one of considerable depth lay over the south-west of England. This system caused strong winds or gales from between South-East and North-East over our Islands and very strong Westerly gales over the Bay of Biscay. Later in the week other disturbances appeared off our south-west coasts and some shallow systems in different parts of the Mediterranean as well as in the extreme north of Europe.

Temperature was very low under the immediate influence of the anticyclone but was fairly high in the extreme western countries. Very heavy rains were frequently experienced over Italy and the adjacent parts of France, and some rather heavy falls over the south-west of England. Over Europe as a whole, the weather, although dull, was rather dry. By the end of the period the anticyclone had given way especially on its northern side, and the general distribution of pressure was becoming more irregular.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 296.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	2·9	− 2·8	7	− 7	SHEFFIELD	1·8	—	4	—	WESTBOURNE †	5·7†	− 5·7	11†	− 11
STRATHPEFFER SPA	1·0	− 5·9	2	− 13	WORKSOP	4·3	− 2·6	8	− 5	VENTNOR HOSPITAL	3·9	− 7·2	7	− 13
EDINBURGH	0·0	− 5·1	0	− 11	THURCASTON	4·9	− 2·0	9	− 4	BOURNEMOUTH	—	—	—	—
COCKLE PARK	0·0	—	0	—	TUNBRIDGE WELLS	4·6	—	9	—	MARLBOROUGH	3·5	− 4·5	7	− 9
NEWCASTLE-ON-TYNE	0·0	—	0	—	MARGATE	6·4	− 4·1	12	− 8	SOUTHPORT	2·7	—	5	—
YORK	0·0	− 5·6	0	− 11	BROADSTAIRS	—	—	—	—	RHYL †	6·4	—	13	—
CROMER	—	—	—	—	RAMSGATE	9·9	—	18	—	ABERDOVEY †	9·9†	—	19†	—
LOWESTOFT	4·9	—	9	—	EASTBOURNE	2·3	− 10·1	4	− 19	TENBY †	—	—	—	—
DUNMOW	2·5	—	5	—	BRIGHTON	6·0	− 5·6	11	− 10	TORQUAY	0·6	− 12·3	1	− 22
					WORTHING	5·6	—	10	—	NEWQUAY	4·0	− 7·3	7	− 13
					BOGNOR †	6·2†	—	12†	—	GUERNSEY †	1·1†	− 9·1	2†	− 16
					WATERGATE PARK	4·5	—	8	—					

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Dec. 5th, 1903.	Kilkenny	49	25	40·4	27·4	34·2	− 8·4	0	55	4	0·42	− 0·31	—	—	—	—
" " " "	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	4·2	—	8	—

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 51.] *Third Series.* WEEK ENDING SATURDAY, DECEMBER 26TH, 1903. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 302.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	22	43·5	34·9	39·3	2 above	4	− 3	27	− 5	1896	−125	718	− 53
	1. SCOTLAND, EAST	55	18	42·5	33·2	38·0	1 above	1	− 6	32	− 6	2141	−230	781	− 87
	2. ENGLAND, N.E.	50	30	44·6	37·1	41·0	3 above	7	− 2	20	−13	2569	− 29	526	−159
	3. ENGLAND, EAST	50	32	42·0	36·6	39·4	1 above	0	− 9	18	−19	3086	+ 76	479	−275
	4. MIDLAND COUNTIES	50	32	43·2	37·3	40·4	3 above	3	− 7	18	−20	2826	−129	547	−240
	5. ENGLAND, SOUTH	50	33	43·6	38·1	41·0	1 above	4	−10	16	−11	3312	− 30	314	−229
Principal Grazing Districts.	6. SCOTLAND, WEST	54	25	44·3	35·7	40·2	1 above	6	− 6	25	0	2482	− 75	481	−101
	7. ENGLAND, N.W.	56	28	45·4	37·6	41·7	2 above	10	− 2	19	− 7	2777	− 29	402	−137
	8. ENGLAND, S.W.	52	30	46·7	40·6	43·8	2 above	18	− 1	4	−14	3249	+ 85	230	−176
	9. IRELAND, NORTH	54	27	45·7	37·8	41·9	2 above	10	− 4	18	− 5	2579	−129	416	− 88
	10. IRELAND, SOUTH	57	23	47·1	36·5	42·0	0 (average)	14	− 8	15	− 3	3112	− 7	294	− 75
	— CHANNEL ISLANDS	54	36	48·6	43·4	46·1	1 above	29	− 1	0	− 6	3862	+100	59	− 82

Rainfall.

	DISTRICTS. (See p. 302.)	For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	7	7 less	256	+33	66·0	+16·7
	1. SCOTLAND, EAST	3	3	3 less	229	+37	39·1	+ 8·2
	2. ENGLAND, N.E.	4	4	2 less	195	+18	31·3	+ 6·2
	3. ENGLAND, EAST	2	1	4 less	176	− 3	29·8	+ 5·8
	4. MIDLAND COUNTIES	4	1	4 less	192	+21	34·6	+ 7·4
	5. ENGLAND, SOUTH	2	1	6 less	195	+28	36·3	+ 8·4
Principal Grazing Districts.	6. SCOTLAND, WEST	3	10	4 less	240	+40	66·7	+17·0
	7. ENGLAND, N.W.	2	2	6 less	225	+36	44·3	+10·0
	8. ENGLAND, S.W.	3	3	7 less	219	+27	49·0	+10·5
	9. IRELAND, NORTH	5	7	1 less	263	+37	47·1	+11·1
	10. IRELAND, SOUTH	4	7	3 less	239	+36	48·0	+ 7·9
	— CHANNEL ISLANDS	3	4	5 less	237	+40	38·5	+ 5·8

Bright Sunshine.

	DISTRICTS. (See p. 302.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	+ 1	13	+ 3	1030	− 84	24	− 2
	1. SCOTLAND, EAST	1	− 6	2	−13	1164	−126	27	− 3
	2. ENGLAND, N.E.	1	− 8	1	−15	1271	−102	29	− 2
	3. ENGLAND, EAST	0	−10	0	−19	1435	−139	33	− 3
	4. MIDLAND COUNTIES	0	− 8	0	−15	1258	− 97	29	− 2
	5. ENGLAND, SOUTH	1	− 9	1	−17	1522	− 65	35	− 2
Principal Grazing Districts.	6. SCOTLAND, WEST	6	− 1	11	− 2	1291	− 41	30	− 1
	7. ENGLAND, N.W.	6	0	12	0	1384	+ 60	32	+ 1
	8. ENGLAND, S.W.	9	0	16	0	1515	−106	35	− 2
	9. IRELAND, NORTH	8	0	17	0	1178	− 80	27	− 2
	10. IRELAND, SOUTH	10	0	20	0	1328	−116	31	− 3
	— CHANNEL ISLANDS	6	− 6	12	−11	1747	−127	40	− 3

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was extremely dull in all but the western districts. Very little rain was experienced, however, except in the most western and north-western districts, and even there the amount was small except locally at some Irish and Scotch stations.

Temperature was a little above the mean except in Ireland S., where that value was only just equalled. The highest of the maxima were recorded either on the 21st or 22nd, when the thermometer rose to 57° in Scotland N., and Ireland S., 56° in England N.W. and to 50° or above in all other districts. The lowest of the minima, which were generally registered on Friday or Saturday, ranged from 18° in Scotland E., 22° in Scotland N., and 23° in Ireland S. to 33° in England S. and 36° in the Channel Islands.

Rainfall was less than the mean in all districts. Over the greater part of England the fall was very slight.

Bright Sunshine was just equal to the normal amount in Ireland and the western districts of England, but over Great Britain as a whole there was scarcely any. England E. and the Midland Counties were entirely without bright sunshine, while in England S. there was just 1 per cent of the possible amount. In Ireland S. there was 20 per cent., in Ireland N. and England S.W. 17 and 16 per cent. respectively, and in Scotland N. 13 per cent., the last quoted value being 3 per cent. above the normal.

Barometer and Wind. During the earlier half of the week, when a large anticyclone stretched from Russia to the central parts of the Continent, some large cyclonic disturbances, having their centres on the Atlantic, skirted our most western and northern coasts, and occasioned strong Southerly winds or gales very generally. Later on the anticyclone receded eastwards, and a shallow area of low pressure appeared over the Bay of Biscay and subsequently over France, the Netherlands, and the greater part of the North Sea. With this change the winds over our Islands fell light and shifted to the Northward, while by Saturday, when the barometer had become highest over Scandinavia, the general direction had become North-Easterly over England and the south of Ireland, and South-Easterly or Southerly on our most north-western coasts.

2110*r*. Wy. & S. Ltd.
370 12 | 03

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	48	32	43·3	37·7	40·6	+ 1·2	4	17	6	0·28	− 0·71	*	*	*	*
	Stornoway	51	29	45·9	35·6	41·0	+ 1·9	11	27	2	0·33	− 0·92	8·6	+ 3·4	20	+ 8
	Wick	49	27	43·9	35·1	39·7	+ 1·7	5	27	3	0·10	− 0·57	*	*	*	*
	Lairg Ⓢ	50	22	40·5	31·6	36·2	+ 1·6	0	41	2	0·15	− 0·73	*	*	*	*
	Glencarron Ⓢ	57	22	43·4	34·1	38·9	+ 2·2	4	30	4	1·15	− 1·12	*	*	*	*
	Fort Augustus Ⓢ	54	23	43·7	34·0	39·0	+ 1·1	5	30	4	0·70	− 0·48	0·0	− 2·2	0	− 5
	Fort William	54	24	43·5	36·0	39·9	+ 0·7	4	23	3	1·88	+ 0·36	4·9	+ 2·1	11	+ 4
1. SCOTLAND, E	Nairn	52	25	41·7	32·0	37·0	− 0·5	0	35	6	0·09	− 0·37	*	*	*	*
	Aberdeen	51	29	43·6	35·3	39·6	+ 1·9	4	26	3	0·06	− 0·61	0·4	− 8·7	1	− 10
	Braemar Ⓢ	48	18	37·6	28·8	33·4	− 0·8	0	60	2	1·04	+ 0·31	*	*	*	*
	Ochtertyre Ⓢ	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Leith	55	31	45·3	34·9	40·3	+ 1·2	9	29	2	0·11	− 0·31	*	*	*	*
	Marchmont Ⓢ	51	30	44·1	34·9	39·7	+ 3·4	6	28	4	0·34	− 0·33	3·0	− 4·4	6	− 9
2. ENGLAND, N.E.	Alnwick Castle	50	30	44·3	35·1	39·9	+ 1·9	6	27	5	0·88	+ 0·23	*	*	*	*
	Durham	48	33	42·2	36·5	39·5	+ 2·5	1	20	4	0·45	− 0·11	0·1	− 9·6	0	− 20
	Shields	50	35	45·3	38·3	41·9	+ 3·1	9	16	4	0·46	− 0·04	*	*	*	*
	Scarborough Ⓜ	48	34	44·2	37·8	41·1	+ 2·4	6	17	3	0·22	− 0·37	0·3	—	1	—
	Spurn Head	47	35	44·0	37·1	40·7	+ 1·8	6	20	1	0·04	− 0·40	*	*	*	*
	Fulbeck (Lincolnshire)	49	35	47·7	38·1	43·1	+ 6·3	24	11	4	0·09	− 0·34	0·0	—	0	—
3. ENGLAND, E.	Hillington Ⓜ	48	34	41·4	36·7	39·1	+ 1·9	0	20	3	0·11	− 0·43	0·0	− 9·2	0	− 18
	Yarmouth	46	35	42·1	37·3	39·8	+ 1·8	0	17	2	0·14	− 0·40	*	*	*	*
	Geldeston	47	34	42·1	36·7	39·5	+ 1·3	0	19	3	0·11	− 0·34	0·0	− 10·9	0	− 21
	Cambridge	50	32	42·5	34·7	38·8	+ 1·2	1	27	3	0·03	− 0·36	0·0	− 9·5	0	− 18
	Felixstowe	45	34	42·1	37·3	39·8	+ 1·3	0	17	1	0·09	—	0·0†	—	0†	—
	Rothamsted	49	34	42·4	36·5	39·6	+ 1·9	1	21	4	0·07	− 0·48	0·0	− 9·7	0	− 18
	Shoeburyness	46	34	41·6	36·9	39·3	+ 0·2	0	19	1	0·01	− 0·37	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	48	33	42·2	36·2	39·3	+ 2·4	1	21	4	0·18	− 0·50	0·2	—	0	—
	Bawtry (Hesley Hall)	49	33	43·4	38·0	40·8	+ 3·6	4	16	5	0·15	− 0·31	*	*	*	*
	Nottingham	50	34	44·1	37·7	41·0	+ 3·0	6	17	4	0·09	− 0·46	0·0	—	0	—
	Loughborough	49	34	43·3	38·1	40·8	+ 2·8	4	15	3	0·06	− 0·45	*	*	*	*
	Colly Weston (Stamford)	49	32	41·7	36·0	39·0	+ 2·0	0	21	6	0·11	− 0·35	*	*	*	*
	Cheadle Ⓜ	47	32	41·6	36·6	39·2	+ 2·4	0	20	3	0·08	− 0·62	*	*	*	*
	Birmingham (Edgbaston)	49	32	44·0	37·3	40·8	+ 2·4	6	19	3	0·21	− 0·29	0·0	—	0	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	50	33	44·1	38·1	41·2	+ 2·5	6	16	2	0·20	− 0·35	*	*	*	*
	Cirencester	49	33	44·1	36·8	40·6	+ 3·0	6	21	5	0·10	− 0·54	0·0	− 9·3	0	− 18
	Oxford	49	34	43·4	38·0	40·8	+ 2·1	4	16	3	0·04	− 0·43	0·1	− 9·3	0	− 18
5. ENGLAND, S.	London	50	36	44·0	37·6	40·9	+ 1·7	6	18	0	0·00	− 0·47	0·2‡	− 4·5‡	0‡	− 9‡
	Swarraton (Alresford) Ⓜ	48	35	42·4	37·6	40·1	+ 2·4	1	16	2	0·06	− 0·64	*	*	*	*
	Dungeness	48	33	43·0	37·4	40·3	− 0·1	3	18	1	0·04	− 0·41	0·3	—	1	—
	Hastings (St. Leonards)	49	33	43·2	36·4	39·9	− 0·6	3	21	1	0·10	− 0·55	0·5	− 12·5	1	− 23
	Southampton	50	33	45·0	39·4	42·3	+ 1·8	13	7	2	0·03	− 0·67	0·5	− 10·4	1	− 19
	Portland Bill	49	35	45·3	40·6	43·0	+ 0·6	13	4	3	0·03	—	*	*	*	*
	Shaftesbury Ⓜ	46	33	42·3	38·0	40·2	+ 3·3	1	15	3	0·06	− 0·65	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	52	25	45·7	36·4	41·2	+ 0·8	10	23	4	2·92	+ 0·80	*	*	*	*
	Glasgow	52	28	43·5	36·1	40·0	+ 1·5	4	23	2	0·68	− 0·26	0·0	− 3·7	0	− 8
	Cally Ⓢ	50	25	42·8	34·2	38·7	+ 0·3	2	29	3	0·55	− 0·63	*	*	*	*
	Aspatria	54	28	43·4	34·8	39·3	+ 0·4	4	28	1	0·05	—	5·8	—	12	—
	Douglas (Isle of Man)	51	29	46·3	37·2	41·9	+ 0·5	12	21	3	0·67	− 0·38	11·1	+ 2·3	22	+ 5
7. ENGLAND, N.W.	Newton Rigg	50	29	43·2	33·6	38·6	− 0·3	3	32	1	0·06	—	3·9	—	8	—
	Stonyhurst	49	33	43·4	38·5	41·1	+ 3·1	4	14	1	0·04	− 1·02	1·8	− 4·1	4	− 8
	Blackpool Ⓜ	52	29	45·7	35·6	40·9	+ 1·8	10	27	2	0·28	− 0·44	7·6	+ 1·9	15	+ 4
	Manchester (Prestwich)	49	32	44·1	38·3	41·3	+ 3·3	6	15	2	0·05	− 0·79	0·0	—	0	—
	Liverpool Obsy. (Bidston)	51	33	44·6	37·4	41·1	+ 1·2	7	19	2	0·20	− 0·37	7·2	—	14	—
	Chester (Hawarden Bridge)	53	31	45·5	37·6	41·7	+ 1·0	10	19	1	0·19	—	*	*	*	*
	Llandudno Ⓜ	56	33	48·5	39·3	44·1	+ 2·4	26	8	2	0·09	− 0·59	8·8	+ 0·8	17	+ 2
	Holyhead	52	37	47·1	42·3	44·8	+ 2·0	20	0	2	0·48	− 0·38	*	*	*	*
	Bettws-y-Coed	56	28	46·4	36·2	41·5	− 0·1	12	25	4	0·17	—	3·9	—	8	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	52	34	48·1	42·4	45·4	+ 1·6	24	0	5	0·26	− 0·67	8·0	− 2·1	15	− 4
	Clifton	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Bath	50	35	45·4	39·7	42·7	+ 3·2	15	6	1	0·07	− 0·60	0·0	—	0	—
	Arlington (N. Devon)	50	30	45·1	38·1	41·7	+ 1·4	9	17	2	0·29	− 1·04	*	*	*	*
	Cullompton Ⓜ	51	30	46·1	38·9	42·6	+ 3·4	17	9	4	0·38	− 0·46	1·7	− 7·0	3	− 13
	Falmouth	52	33	47·8	42·9	45·5	+ 1·1	25	0	4	0·59	− 0·65	15·9	+ 3·5	29	+ 6
	Plymouth	52	33	47·6	41·8	44·8	+ 2·1	20	1	4	0·33	− 0·60	11·2	− 0·1	20	0
9. IRELAND, N.	Malin Head	51	32	45·3	39·3	42·4	+ 0·8	14	8	5	0·16	− 0·58	*	*	*	*
	Edenfel (Omagh)	51	29	43·3	35·7	39·7	+ 2·0	4	24	4	0·71	− 0·13	*	*	*	*
	Blacksod Point	54	36	47·9	40·7	44·4	+ 1·3	22	4	6	1·83	+ 0·48	*	*	*	*
	Markree Castle	53	27	45·5	34·4	40·2	+ 0·9	10	31	5	0·66	− 0·28	9·1	+ 1·4	18	+ 3
	Armagh	52	26	45·5	36·5	41·2	+ 2·6	10	23	3	0·46	− 0·19	7·4	− 1·0	15	− 2
	Donaghadee	52	36	46·7	40·3	43·6	+ 2·5	18	5	5	0·55	− 0·08	*	*	*	*
10. IRELAND, S.	Dublin	56	29	47·8	36·6	42·4	+ 0·8	25	15	2	0·08	− 0·45	8·7	− 3·4	17	− 7
	Birr Castle	54	23	45·7	34·1	40·1	+ 0·5	10	32	4	0·54	− 0·16	8·2	− 2·1	16	− 4
	Kilkenny	52	25	45·0	35·4	40·4	− 0·2	8	27	3	0·54	− 0·22	*	*	*	*
	Waterford	52	29	46·9	37·7	42·5	+ 1·4	22	12	4	1·26	+ 0·22	*	*	*	*
	Roche's Point	52	31	46·6	38·6	42·8	− 1·3	20	10	7	0·76	− 0·48	*	*	*	*
	Valencia	54	35	48·6	37·6	43·3	− 2·0	28	12	5	1·20	− 0·24	14·3	+ 4·6	27	+ 9
	Killarney	55	33	49·4	35·9	42·9	− 0·6	32	17	6	1·17	− 0·46	*	*	*	*
	Foynes	57	28	46·9	36·2	41·8	0·0	14	25	2	0·30	− 0·72	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	42	51·4	46·6	49·1	+ 2·3	50	9	3	0·63	− 0·30	13·6	+ 0·8	25	+ 1
	Jersey	51	36	45·7	40·1	43·0	− 0·6	15	5	3	0·98	− 0·76	4·3	− 9·9	8	− 18

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

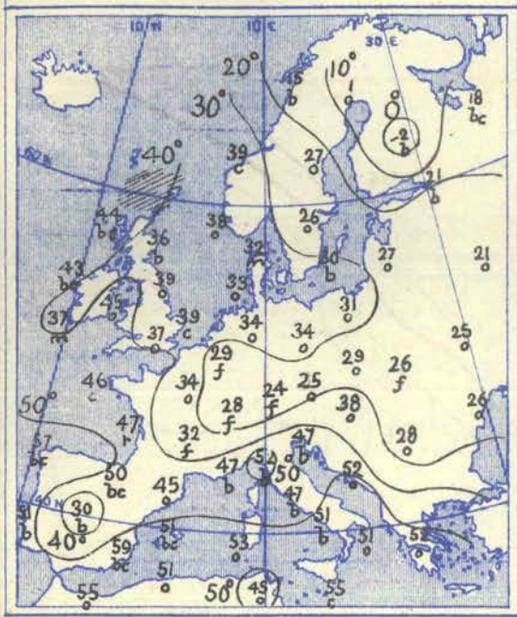
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

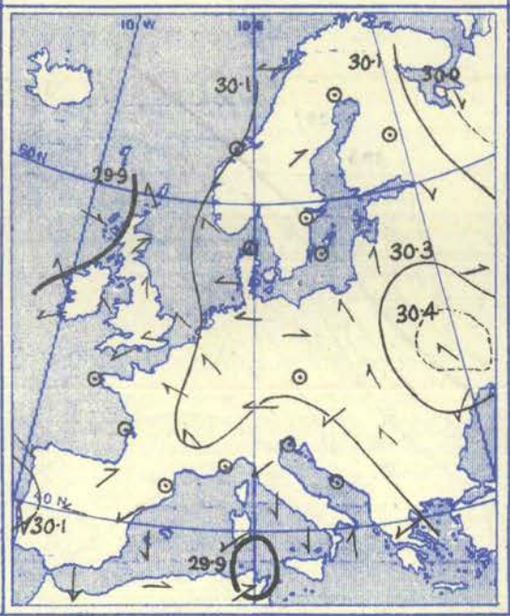
Note.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 20th December, 1903.

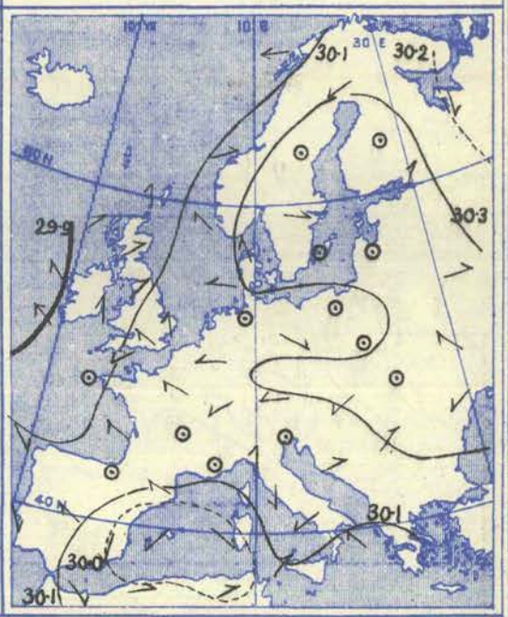
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over southern Europe generally, and also in the north of Ireland and in northern Russia. Cloudy and dull elsewhere, with fog in many isolated places, and with rain in the Shetlands as well as at Skudesmaes; snow falling at Nicolaieff. Rain falling later over the whole of Ireland, and also in Denmark, the Netherlands, and some parts of southern Italy; snow reported at the Scaw in evening.

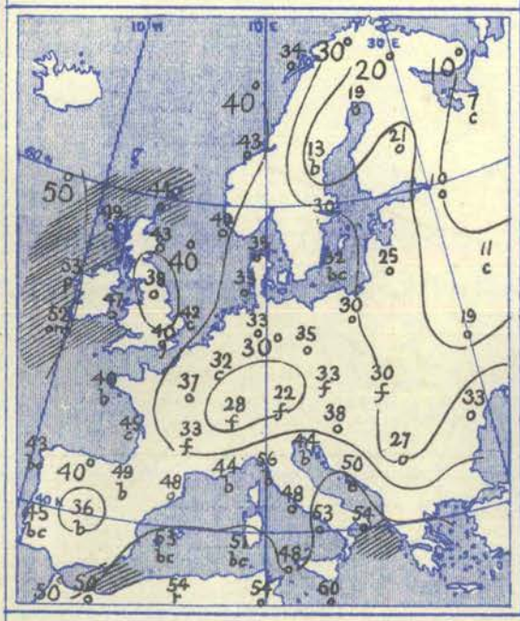
Temperature risen in the north of Scotland, fallen over England and Ireland, changed rather irregularly elsewhere. Morning readings highest, 55° at Malta and Nemours, 54° at Barcelona, 53° at Cagliari, and 52° at Athens and Lesina. Lowest, −2° Fahr. at Kuopio, +1° at Haparanda, 3° at Uleaborg, and 15° at Bodo; below the freezing point over nearly the whole of northern and eastern Europe, and below 40° over the northern and central parts of the United Kingdom. Daily maxima below 40° over central England, but thermometer reaching 50° or more at some of our western and southern stations; exceeding 55° in many parts of southern Europe, and touching 64° at Palermo and Malta.

Wind light from the Eastward and South-Eastward over western Europe generally; very variable in other regions. South-Easterly breeze freshening later on many parts of our western coasts; wind veering to the South-Westward in the northern parts of the United Kingdom.

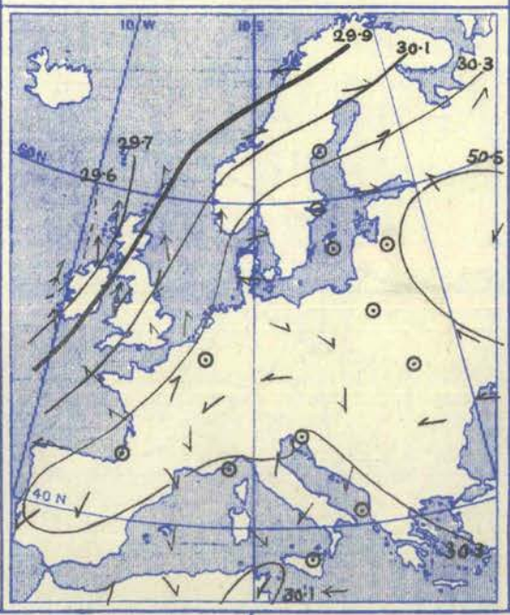
Barometer highest, 30·4 ins. and upwards in the south of Russia; 30·1 ins. and upwards in an anticyclone covering the greater part of northern, eastern, and central Europe, and also in another system extending over Portugal from the Atlantic. Lowest, 29·9 ins. and less in a shallow depression lying off our own extreme north and north-west coasts, and also in another disturbance between Sicily and Tunis. Depression off our north-west coasts subsequently moving away to the northward, but new disturbance approaching Ireland in evening.

Monday, 21st December, 1903.

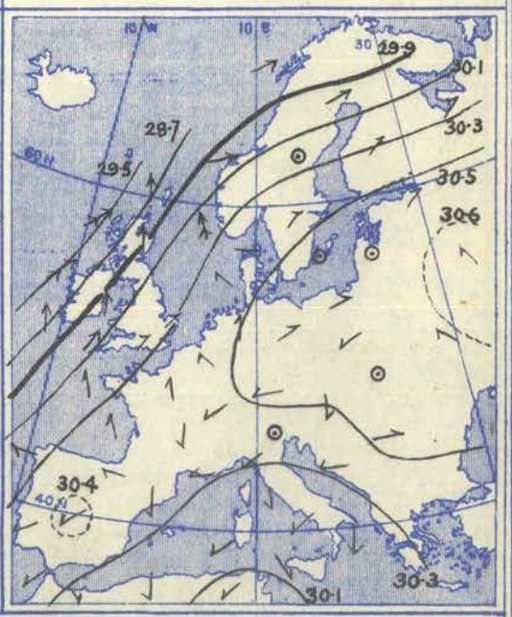
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the Spanish Peninsula, the south-east of France, north Italy and Dalmatia, generally dull in all other localities, with showers in Ireland and at Oxford, and rain at Algiers and Hangö. Mist or fog in many parts of our islands and at a number of Continental stations as far east as Lemberg. Rain falling during the day over the western and northern portions of our islands, but only at a few scattered foreign stations, the amounts being small as a rule, but 0·6 in. measured at Valencia, 0·7 in. at Algiers, 0·8 in. at Bodö, 0·9 in. at Nemours, and 1 in. at Blacksod Point.

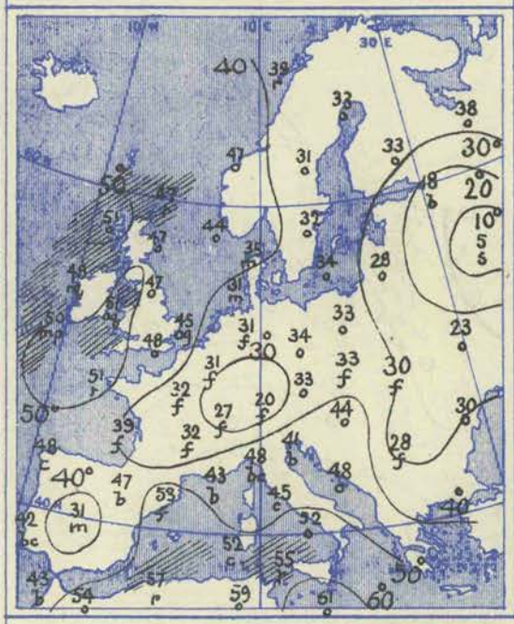
Temperature at 8 a.m. risen over the greater part of our area, decidedly in Ireland and northern Scandinavia; a rather decided fall over north-eastern Russia. Highest readings, 60° at Malta, 59° at Alicante, 57° at Sfax; 50° at Pembroke and Scilly, and 52° at Valencia. Lowest, 11° at Moscow, 10° at St. Petersburg, 7° at Archangel, and 5° at Kharkov. Rising subsequently to 27° at Memel, 28° at Lemberg; 50° to 55° in many parts of the British Isles and the west of France; 64° at Malta and Palermo, and 66° at Biskra and Sfax.

Wind in morning Southerly over our islands, strong to a gale on the western coasts, strong from South at Skudesnaes and from East at Malta, calms and light breezes from various directions prevailing generally over Europe and north Africa. A moderate to strong Southerly gale experienced later on our western and northern coasts and in the south-west of Norway; a South-Westerly gale at Uleaborg, and a strong breeze to a gale from North-East on the coast of Tunis; no important change elsewhere.

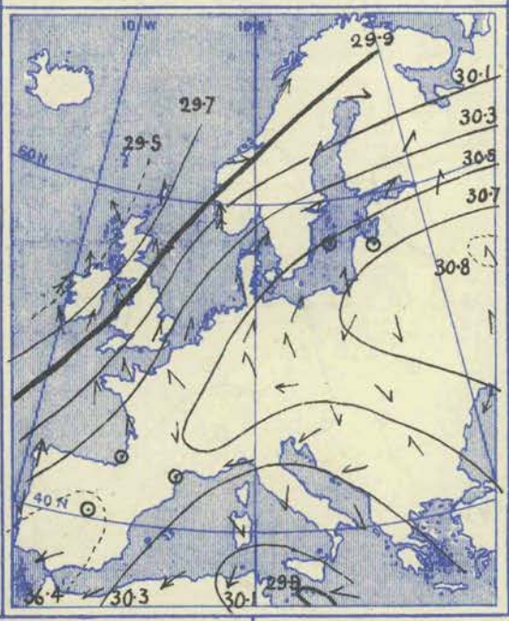
Barometer at 8 a.m., highest, in an anticyclone covering the greater part of the Continent; above 30·5 ins. at various Russian stations. Lowest, in a disturbance affecting our western districts, 29·6 ins. on the coast of Mayo. A shallow depression, above 30·0 ins., over Tunis. The Continental anticyclone increasing in intensity, barometer up to nearly 30·7 ins. at Moscow by evening; another centre of high pressure, above 30·4 ins., forming over Spain. The Atlantic depression deepening, barometer below 29·5 ins. in the Hebrides; the Tunisian disturbance remaining stationary.

Tuesday, 22nd December, 1903.

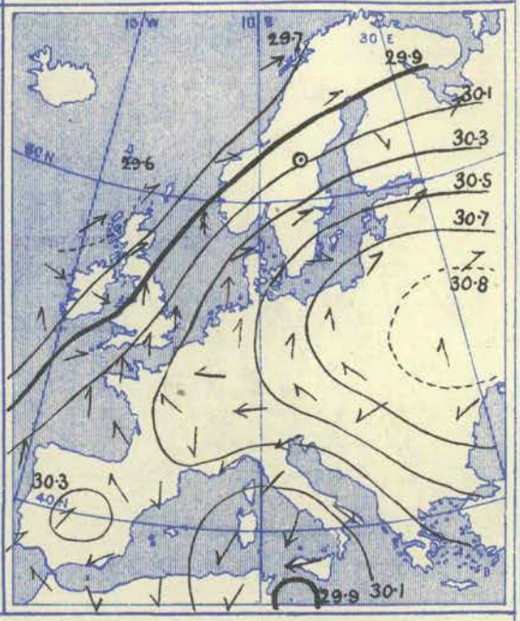
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull very generally, but fine in the extreme south of France and Spain. Rain falling at Algiers, Palermo, and Brest, along our most western and northern coasts, and in the north-west of Norway, and fog prevailing in several parts of central Europe, over the Netherlands, and at the mouth of the Elbe. Some rain experienced later at most of our own western and northern stations, and heavier amounts at Bodö and on several shores of the Mediterranean.

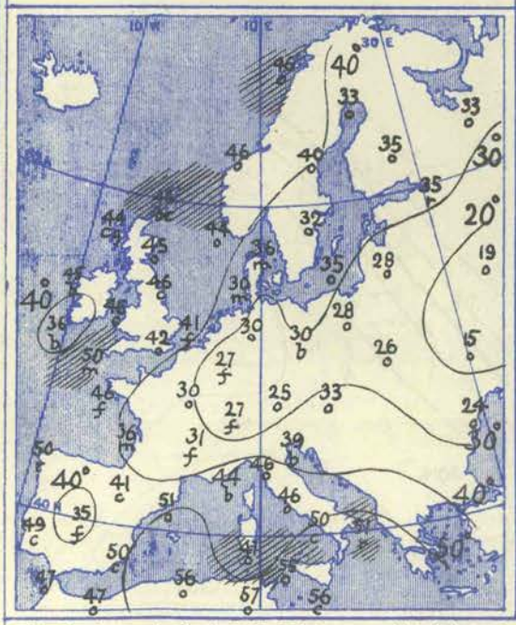
Temperature fallen or changed little over the greater part of Europe, but risen in the most north-western and northern countries. Readings at 8 a.m. ranging from 61° at Malta, 57° at Brindisi, and 52° at Pembroke, to below 40° in most Continental regions, below 30° in many places, and to below 20° over the major portion of Russia. Lowest readings, 6° at Kharkov and 5° at Moscow. Rising during day to 55° at Leith and to about 60° at some stations in the extreme south. Severe frost continuing all day in Russia, and maxima no higher than 32° in many parts of central Europe.

Wind at 8 a.m. strong to a gale from the Southward over the United Kingdom and the western seaboard of the Continent. Light and anticyclonic over all the eastern and central countries. An irregular cyclonic circulation of strong winds or gales prevailing over the central parts of the Mediterranean. Very little change during day.

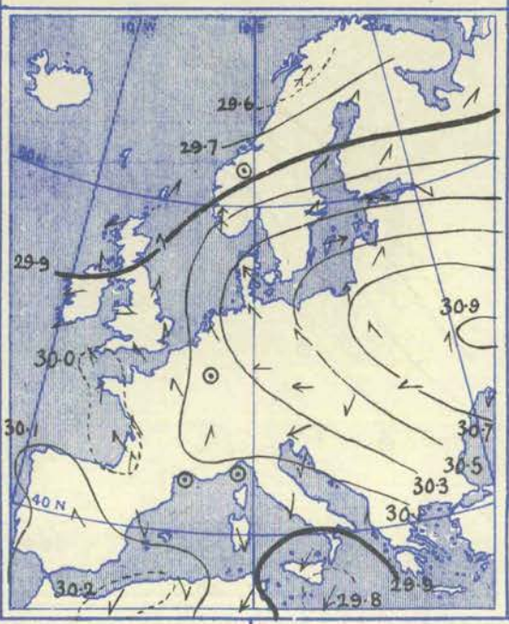
Barometer at 8 a.m. ranging from 30·81 ins. at Moscow in the centre of a large anticyclone extending westward across central Europe to France, to 29·9 ins. and less in a depression near Malta, and to less than 29·6 ins. in a depression off our own north-west coasts. No change in the general distribution during day. Depression in north-west moving on towards Norway, but a rather brisk fall of the barometer setting in over the Bay of Biscay and the west of France.

Wednesday, 23rd December, 1903.

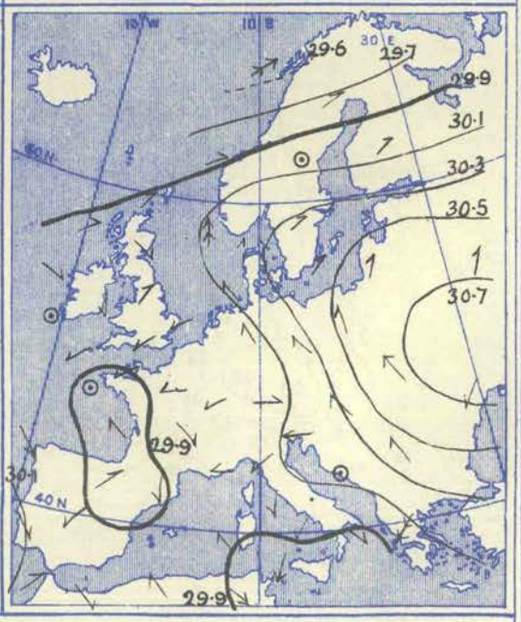
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in Ireland, fair over north Britain, and the sky clear at a few scattered foreign stations, but generally dullness prevalent in all countries, rain falling only at Brindisi, Corunna, and St. Petersburg. Mist or fog on the south-west and east coasts of England and at many of the stations in the western half of Europe. Rain falling during the day at many places in the British Isles, the Spanish Peninsula, and along the African coast, and at various stations in other countries. The amounts small as a rule, but 0·5 in. at Scilly, 1 in. at Tunis and Ushant, and 1·2 ins. at Athens.

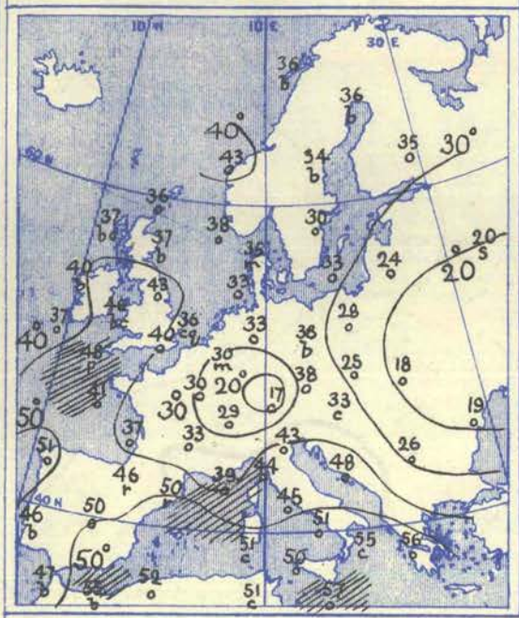
Temperature at 8 a.m. risen over the Spanish Peninsula, south-central Europe, and a great part of Russia and Scandinavia, fallen generally elsewhere. Highest readings, 57° at Brindisi and La Calle, 56° at Malta and Algiers, 55° at Palermo and Tunis, 50° at Scilly, Barcelona, and Naples, and 46° at Bodö. Lowest, 34° at Parsonstown, 25° at Munich and Lemberg, 19° at Moscow, 16° at Kharkov, and 15° at Kiev. Rising later to 70° at Biskra, 63° at Nemours, 61° at Oran, La Calle, and Sfax, 60° at Cagliari, 58° at Scilly and Bettws-y-Coed, and 51° at Plymouth; 32° and under at several Continental stations.

Wind in morning Southerly to Westerly over the northern half of our Islands and northern Europe, mostly light or moderate, but blowing strongly at some Norwegian and Russian stations, a gale at Bodö, Skudesnaes, and on the Gulf of Finland. Over the rest of our area mainly South-Easterly to North-Easterly winds, blowing fresh or strong at several foreign stations between Denmark and Malta, a moderate gale at Tunis. No important change over northern Europe during the day, a North-Easterly gale reported over Greece in the evening, elsewhere the strength diminishing.

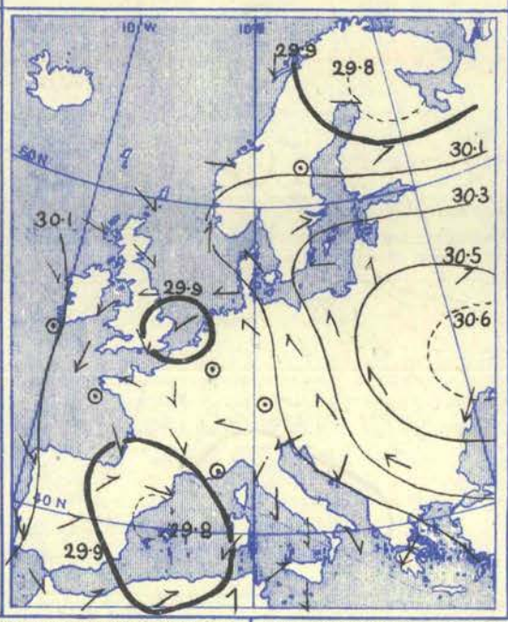
Barometer at 8 a.m. highest, 30·9 ins. over south central Russia and above 30·2 ins. on the western coast of Algeria. Lowest, about 29·5 ins. on the Norwegian coast, beyond the Arctic Circle; about 29·7 ins. in a depression near Malta, and below 30·0 ins. in a shallow disturbance extending from the Bristol Channel down the Bay of Biscay. The distribution of pressure undergoing comparatively slight modifications in the course of the day.

Thursday, 24th December, 1903.

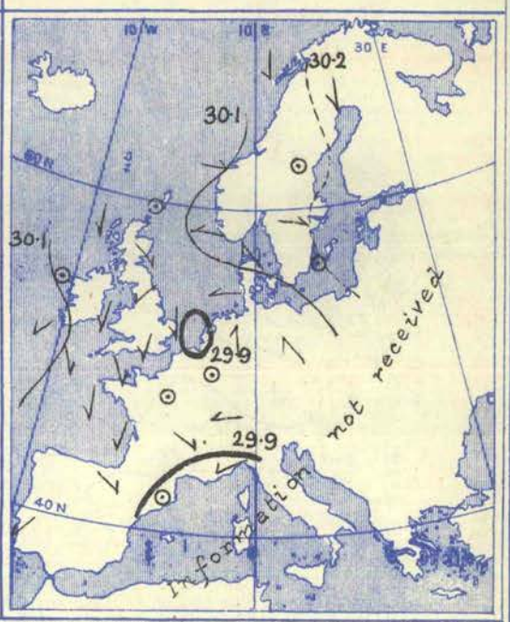
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in the west and extreme north of our Islands, and also in the north of Scandinavia. Dull in all other parts of Europe, with fog and slight rain at many of the English stations, rain falling also in the extreme south of France, and at Barcelona and Oran. Showers falling later in most parts of the United Kingdom, and considerable quantities of rain in the south of France.

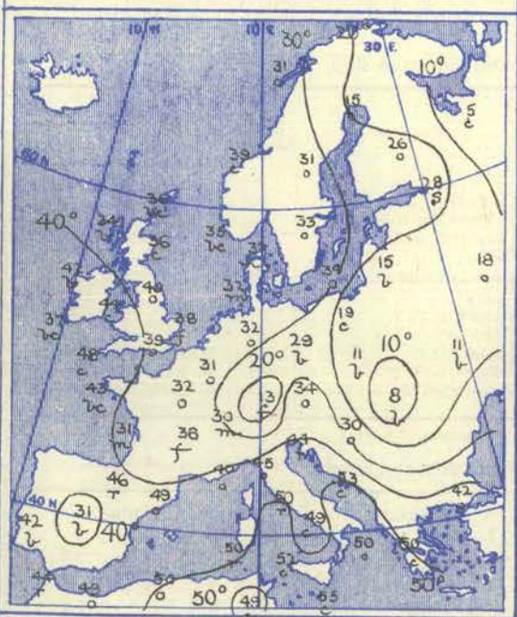
Temperature risen in many parts of France, but fallen in most other countries. Morning readings highest, 57° at Malta, 56° at Patras, and 55° at Brindisi and Nemours; above 50° at most of the Mediterranean stations. Lowest, 8° at Nicolaieff, 17° at Munich, 18° at Lemberg, and 19° at Odessa. Slightly below the freezing point over the Netherlands and central France, and very little above it in the north of Scotland. Remaining below 40° all day at several of our own northern, eastern, and south-eastern stations, and also over the northern and central parts of the Continent; not exceeding 32° at the Helder and Brussels.

Wind light from the Eastward or South-Eastward over all the more central parts of the Continent, and from the North-Eastward or Northward over England, Ireland, and the north of France; variable over the south of France and the Spanish Peninsula. Light from the Northward in Italy, strong to a gale from the North-Eastward in Greece. Westerly or North-Westerly in Scotland, South-Westerly in Finland. Subsequently backing to the North-Westward at many of the English stations; no important change occurring elsewhere.

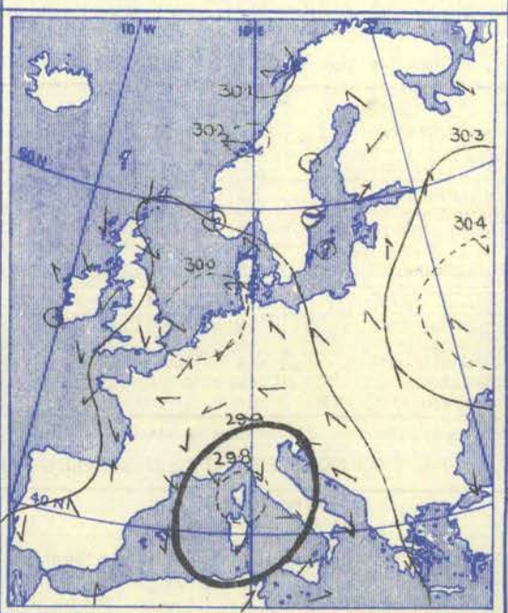
Barometer highest 30·6 ins. and upwards in the south of Russia, 30·1 ins. and upwards in an anticyclone covering all the more eastern parts of Europe, and also in another system extending from the Atlantic over Portugal and the west of Ireland. Lowest, 29·8 ins. and less in two shallow depressions, one lying over Lapland and the other over the Balearic Isles; 29·9 ins. and less in another shallow disturbance over the Netherlands and the east of England. Depression over Lapland subsequently moving away to the eastward, other disturbances partially filling up.

Friday, 25th December, 1903.

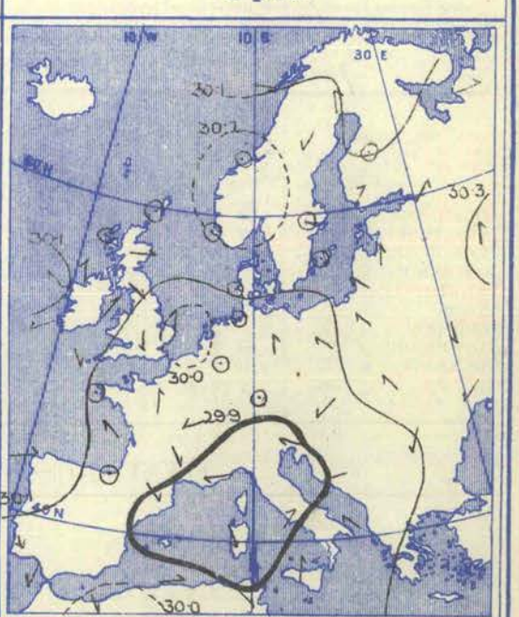
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine and clear at several of our western and northern stations and at a few scattered situations abroad, but generally dull and overcast, with showers at Pembroke and Malin Head, rain at several Italian stations, San Fernando, Biarritz, and Hangö, and snow at St. Petersburg. Mist or fog at various places in the British Isles and in the more western parts of Europe. Rain or snow falling during the day in many isolated districts, the amounts in most cases being very small, but 0·9 in. measured at Breslau and 1·1 ins. at Rome.

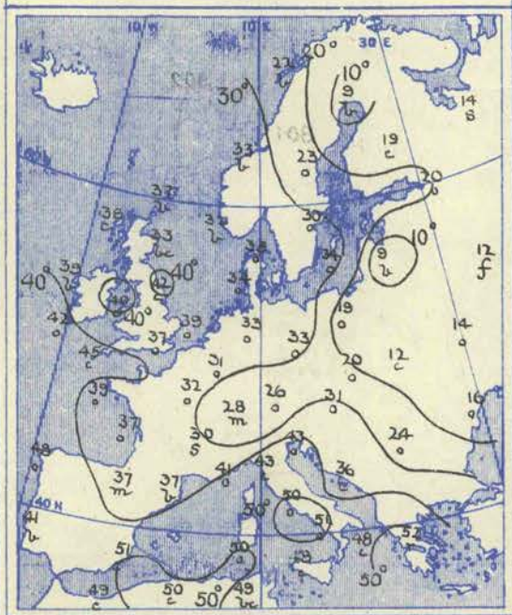
Temperature at 8 a.m. risen over the greater part of France, fallen in nearly all other regions. Highest readings, 55° at Malta, 53° at Lesina, 52° at Palermo, and 51° at Barcelona; 48° at Scilly and 44° at Holyhead. Lowest, 33° at Leith, 32° at Nairn; 35° at Oporto, 31° at Madrid; 13° at Munich, 11° at Kiev and Warsaw, 8° at Lemberg, and 5° at Archangel and Kharkov. Rising during the day to 70° at Biskra, 64° at Alicante and La Calle, 62° at Palermo and 60° at Cagliari; to 49° at Scilly and 48° at Brest and Lorient; to 19° at Haparanda, 18° at Memel, and 16° at Lemberg.

Wind in morning exceedingly variable in direction, under the influence of a number of high and of low pressure systems. Blowing a fresh Westerly breeze at Alicante and Hangö, but very few other places reporting as much as a moderate breeze; in many instances calm. Throughout the day calms and light variable breezes prevailing all over the region under observation.

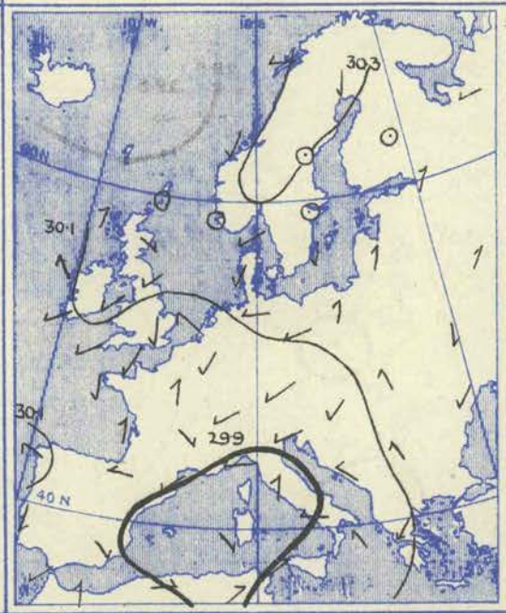
Barometer at 8 a.m. highest in an anticyclone covering eastern Europe, above 30·4 ins. over central Russia; above 30·2 ins. in another forming over Norway; and above 30·1 ins. over our western districts and down to Portugal. Lowest in a depression over Italy and the western Mediterranean, below 29·8 ins. round Corsica; and below 30·0 ins. in a shallow disturbance on the lower part of the North Sea and the Netherlands. In the course of the day the Russian anticyclone decreasing slightly in intensity and the Norwegian one increasing, the changes elsewhere being of an unimportant character.

Saturday, 26th December, 1903.

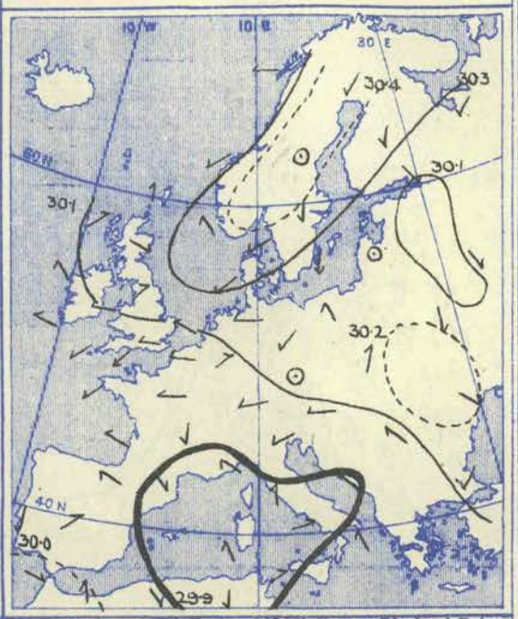
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



6 p.m.



Weather in morning fair or fine over Ireland, Scotland, and across to Norway and northern Sweden, also in Portugal and North Africa; generally dull and overcast elsewhere, with rain at Spurn Head, Jersey, Bilbao, Barcelona, and Patras, and snow at Lyons, Turin, Prague, Breslau, Moscow, and Archangel. Mist up the east coast of Scotland and at Portland Bill, and at some scattered stations on the Continent. Rain or snow falling subsequently in various parts of the British Isles, France, Italy, western Algeria, and northern Russia, the amounts, as a rule, being very small, but Nice returned 0·7 in., Rome, 1·1 in., and Naples and Kuopio, 1·3 in.

Temperature at 8 a.m. fallen at the majority of stations. Highest readings, 52° at Patras, 51° at Alicante, Naples, and Athens, and 50° at Algiers, Cagliari, and Rome, 45° at Scilly, and 42° at Valencia. Lowest, 36° at Lésina, 35° at Oporto, and 25° at Parsonstown; 20° and under over East Prussia, Hungary, and Russia, 9° at Memel, Riga, and Haparanda. Rising during the day to 64° at Biskra and Tunis, 63° at La Calle, and 61° at Palermo, to 45° at Valencia and 46° at Scilly, to 23° at Bodö and St. Petersburg, 27° at Memel and Cracow, 25° at Hernösand, and 18° at Lomberg and Haparanda.

Wind in morning blowing freshly from between South-East and North-East at Blacksod Point Spurn Head, Yarmouth, and Patras; calms and light breezes from various quarters being reported in nearly all other localities. Other than an increase to a fresh breeze from the North-Eastward at Portland Bill and Belfort, and to a strong breeze from North at Wisby, no change of any note occurring during the day.

Barometer at 8 a.m. highest in an anticyclone covering north-western Europe, above 30·3 ins. in Scandinavia. Above 30·2 ins. in another over South Russia, above 30·1 ins. in the north-west of Spain. Lowest, about 29·8 ins. in a shallow depression occupying the western basin of the Mediterranean. The Scandinavian high pressure increasing in intensity later, with the barometer up to about 30·5 ins. in the north of Sweden by evening. No important modifications reported elsewhere.

IV.—GENERAL NOTES, etc.

In the early part of last week, when a large anticyclone extended from Russia over the central portions of the Continent, the weather in these Islands was affected by cyclonic systems of considerable intensity which moved in a north-north-easterly direction along our extreme west and north-west coasts. These disturbances occasioned Southerly winds of increasing strength over the entire Kingdom, with gales in the west, and with a very mild air, the thermometer on Tuesday rising above 50°, not only in our southern districts, but also at places in the north of Ireland. Over the northern and central countries the weather was much colder than in this country, and in Russia a severe frost prevailed.

After Tuesday the western depressions all passed away to the northward, while a tongue of high pressure spread over Ireland and Scotland from the Atlantic, the wind in those countries veering to the Westward, with finer weather, and with a decided fall of temperature. A shallow low pressure system appeared, however, over the Bay of Biscay and the west of France, this disturbance ultimately breaking into two portions, one of which moved north-eastwards to the Netherlands and the east of England, while the other travelled southwards to the Mediterranean. The depression in our own neighbourhood caused a continuance of dull and rather cold weather in the southern and eastern districts, with showers of snow or cold rain, the wind being chiefly from the Northward or North-Eastward.

Towards the close of the week the anticyclone over Russia began to break up, but a new one which was formed over Scandinavia spread westwards and southwards, and caused a shift of wind to the Eastward over England and the neighbouring parts of the Continent, the weather in those regions continuing dull and damp, with a temperature slightly below the average.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 302.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	7·3	+ 1·7	18	+ 4
STRATHPEFFER SPA	8·2	+ 1·3	18	+ 3
EDINBURGH	0·0	- 5·3	0	- 11
COCKLE PARK	1·2	—	3	—
NEWCASTLE-ON-TYNE	0·0	—	0	—
YORK				
CROMER	—	—	—	—
LOWESTOFT	0·1	—	0	—
DUNMOW	0·0	—	0	—
SHEFFIELD	0·2	—	0	—
WORKSOP	0·9	- 6·1	2	- 12
THURCASTON	0·0	- 7·2	0	- 14
TUNBRIDGE WELLS	0·0	—	0	—
MARGATE	0·3	- 10·0	1	- 19
BROADSTAIRS	0·4	—	1	—
RAMSGATE	—	—	—	—
EASTBOURNE	1·2	- 11·0	2	- 20
BRIGHTON	0·2	- 11·1	0	- 21
WORTHING	1·5	—	3	—
BOGNOR	3·6†	—	7†	—
WATERGATE PARK	0·0	—	0	—
WESTBOURNE	2·5†	- 8·9	5†	- 17
VENTNOR HOSPITAL	0·3	- 10·4	1	- 19
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	0·1	- 7·9	0	- 15
SOUTHPORT	7·1	—	14	—
RHYL	11·4	—	22	—
ABERDOVEY	16·6†	—	32†	—
TENBY	8·1	- 2·1	15	- 4
TORQUAY	3·2	- 8·8	6	- 16
NEWQUAY	15·1	+ 3·8	28	+ 7
GUERNSEY	1·2†	- 0·2	2†	- 17

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATA.—The values below must be substituted for those which have already appeared.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
VOL. XX. No. 45 p. 266 ..	Shaftesbury	52	—	51·1	—	47·6	+ 4·3	39	—	—	—	—	—	—	—	—
" " " " ..	Donaghadee	—	—	—	43·0	47·9	+ 3·0	41	—	—	—	—	—	—	—	—
" " 47 p. 278 ..	Scarborough	—	32	—	39·6	42·8	+ 0·7	—	15	—	—	—	—	—	—	—
" " " " ..	Shaftesbury	—	—	48·7	41·0	44·9	+ 4·3	25	3	—	—	—	—	—	—	—
" " " " ..	Hillington	—	—	48·8	—	43·0	+ 2·3	28	—	—	—	—	—	—	—	—
" " 48 p. 284 ..	London	—	—	—	—	—	—	—	—	—	—	—	3·9	- 2·4	7	- 4

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; W. N. SHAW, F.R.S., SECRETARY.

PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., AND 32 ABINGDON STREET, WESTMINSTER, S.W.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

VOL. XX. No. 52.] *Third Series.* WEEK ENDING SATURDAY, JANUARY 2ND, 1904. [*Price 6d.* *Annual Subscription post paid* £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 30 years' observations (1871-1900). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the twenty years 1881-1900. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the thirty-five years 1866-1900, but the *Mean numbers of Rainy Days* are those for the thirty years 1871-1900 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the twenty years 1881-1900.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface.

Temperature of the Air.

	DISTRICTS. (See p. 308.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 4th, 1903. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°		Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	46	12	40·0	30·0	35·2	3 below	0	− 7	48	+15	1896	−132	766	− 38
	1. SCOTLAND, EAST	43	16	37·5	29·5	33·7	4 below	0	− 7	58	+19	2143*	−235	839	− 68
	2. ENGLAND, N.E.	42	22	38·8	32·7	35·9	3 below	0	− 9	43	+ 9	2569	− 38	569	−150
	3. ENGLAND, EAST	44	23	36·6	31·1	33·9	4 below	0	− 9	57	+19	3086	+ 67	536	−256
	4. MIDLAND COUNTIES	45	20	35·3	28·9	32·2	6 below	0	−10	69	+30	2826	−139	616	−210
	5. ENGLAND, SOUTH	47	18	36·6	28·4	32·6	7 below	0	−14	66	+37	3312	− 44	379	−193
Principal Grazing Districts.	6. SCOTLAND, WEST	43	20	38·2	31·9	35·1	4 below	0	−11	48	+22	2482	− 86	529	− 79
	7. ENGLAND, N.W.	47	20	36·6	29·6	33·2	7 below	0	−11	62	+35	2777	− 40	464	−102
	8. ENGLAND, S.W.	50	22	38·6	30·9	34·9	7 below	0	−18	50	+30	3248*	+ 66	280	−146
	9. IRELAND, NORTH	47	22	39·1	32·8	36·1	4 below	0	−14	41	+17	2579	−143	457	− 71
	10. IRELAND, SOUTH	50	23	42·3	33·5	38·1	4 below	1	−20	31	+13	3113	− 27	325	− 62
	— CHANNEL ISLANDS	52	28	42·5	36·0	39·4	6 below	1	−27	22	+15	3863	+ 73	81	− 67

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 308.)	Rainfall. For the Week. No. of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 4th, 1903. No. of Rainy days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 4th, 1903. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	1	12 less	257	+29	66·1	+15·5	8	+ 3	17	+ 6	1038	− 81	24	− 2
	1. SCOTLAND, EAST	3	2	5 less	232	+36	39·4*	+ 7·9	1	− 7	3	−14	1165	−133	26	− 3
	2. ENGLAND, N.E.	2	1	4 less	197	+16	31·4	+ 5·8	4	− 5	7	−10	1275	−107	29	− 2
	3. ENGLAND, EAST	2	1	4 less	178	− 5	29·9	+ 5·4	10	− 1	19	− 1	1445	−139	33	− 3
	4. MIDLAND COUNTIES	2	1	5 less	194	+20	34·7	+ 7·0	6	− 1	12	− 2	1264	− 98	29	− 2
	5. ENGLAND, SOUTH	2	1	5 less	197	+26	36·4	+ 7·9	9	− 3	17	− 5	1531	− 68	35	− 2
Principal Grazing Districts.	6. SCOTLAND, WEST	1	1	12 less	241	+36	66·8	+15·8	6	· 7	11	−14	1297	− 48	29	− 1
	7. ENGLAND, N.W.	1	1	7 less	226	+33	44·4	+ 9·3	6	− 3	12	− 5	1390	+ 57	32	+ 1
	8. ENGLAND, S.W.	2	2	7 less	221	+25	49·2	+ 9·7	2	−10	3	−18	1517	−115	34	− 3
	9. IRELAND, NORTH	2	4	4 less	265	+34	47·5	+10·6	8	− 1	17	− 1	1186	− 81	27	− 2
	10. IRELAND, SOUTH	3	6	4 less	242	+34	48·6	+ 7·5	8	− 4	15	− 7	1336	−119	30	− 3
	— CHANNEL ISLANDS	4	2	6 less	241	+40	38·7	+ 5·2	7	− 6	12	−11	1754	−133	40	− 3

* This value has been altered owing to the receipt of further information.

Bright Sunshine.—For certain of the Districts the values of Bright Sunshine in this Table are based on the records from a part only of the Stations included in the Tables under II. and IV. For certain of the Stations Mean Values are not available, and for the Districts containing these Stations the "Differences from Mean" are based on the records from a smaller number of Stations than those supplying the values for "Hours Recorded."

General Remarks.

Weather during this week was cold and dry, and generally very dull. By the end of the period, however, it had become less settled and some rain was then experienced in most districts.

Temperature was below the mean, the deficit ranging from 3° in Scotland N. and England N.E. to 6° in the Midland Counties and the Channel Islands, and to 7° in England S.W., N.W., and S. The lowest of the minima were registered about the middle of the period when the thermometer fell to 12° in Scotland N., 16° in Scotland E., 18° in England S., and to between 20° and 23° in all other districts except the Channel Islands, where the lowest reading was 28°. The highest of the maxima were recorded on Saturday, when they ranged from 52° in the Channel Islands and 50° in England S.W. and Ireland S. to 42° in England N.E. The daily maxima registered during the greater part of the week were very low—sometimes below the freezing point over the inland parts of England.

Rainfall was much less than the mean in all districts, in most parts of Great Britain there was scarcely any.

Bright Sunshine was less than the mean excepting in Scotland N. The percentage of the possible duration ranged from 19 in England E. and 17 in Scotland N., England S., and Ireland N., to 7 in England N.E., and to 3 in Scotland E. and England S.W.

Barometer and Wind. During the whole of the period pressure was highest in an anticyclone lying over the countries to the eastward of the North Sea, and lowest over Spain and the Bay of Biscay or off our western and north-western coasts. The wind was consequently mainly Easterly in the south and south-west and South-Easterly to Southerly in the northern and north-western districts. It blew freshly or even strongly at times on our south-eastern and southern coasts, but had little force elsewhere until the end of the week, when it became more Southerly generally and increased in strength to a moderate to fresh gale along our western and northern coasts as a whole, and to a strong gale at Wick.

2115*r*. Wy. & S. Ltd.
370 12 | 03

II.—DATA from which the SUMMARY on page 307 has been calculated.

Districts.	Names of Stations.	Temperature. In Degrees Fahrenheit.								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
				Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°							
		°	°	°	°	°	°	°	°		Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	43	35	41·4	36·3	39·0	− 0·4	0	21	5	0·20	− 0·74	*	*	*	*
	Stornoway	46	29	42·9	31·6	37·5	− 1·6	3	39	1	0·10	− 1·09	10·5	+ 4·6	24	+ 11
	Wick	45	25	42·1	34·0	38·2	+ 0·1	0	29	3	0·18	− 0·44	*	*	*	*
	Lairg Ⓢ	39	14	36·0	24·6	30·5	− 4·4	0	81	0	0·00	− 0·87	*	*	*	*
	Glencarron Ⓢ	44	20	38·4	26·2	32·5	− 4·5	0	67	0	0·00	− 2·26	*	*	*	*
	Fort Augustus Ⓢ	42	12	39·2	26·5	33·1	− 5·1	0	62	0	0·00	− 1·15	—	—	—	—
	Fort William	43	21	40·0	31·0	35·7	− 3·5	0	44	1	0·08	− 2·10	5·5	+ 1·5	12	+ 3
1. SCOTLAND, E.	Nairn	43	18	37·7	27·4	32·8	− 4·8	0	64	1	0·01	− 0·46	*	*	*	*
	Aberdeen	43	29	40·7	33·4	37·2	− 0·5	0	34	6	0·46	− 0·17	0·1	− 10·1	0	− 22
	Braemar Ⓢ	36	16	34·7	27·0	31·0	− 3·6	0	77	5	0·26	− 0·45	*	*	*	*
	Ochtertyre Ⓢ	40	19	36·3	29·3	32·9	− 4·0	0	64	2	0·16	− 0·88	*	*	*	*
	Leith Ⓢ	42	23	39·4	30·6	35·2	− 4·1	0	48	1	0·01	− 0·40	*	*	*	*
	Marchmont Ⓢ	38	23	36·0	29·3	32·8	− 3·8	0	64	3	0·18	− 0·47	4·0	− 4·2	8	− 9
2. ENGLAND, N.E.	Alnwick Castle	42	22	39·3	31·2	35·4	− 2·7	0	46	4	0·19	− 0·41	*	*	*	*
	Durham	39	22	35·8	30·4	33·2	− 4·2	0	62	2	0·10	− 0·42	0·7	− 9·3	1	− 19
	Shields	42	27	40·1	32·9	36·6	− 2·2	0	38	3	0·13	− 0·33	*	*	*	*
	Scarborough Ⓜ	42	32	39·3	34·6	37·0	− 1·6	0	35	1	0·03	− 0·51	3·8	—	7	—
	Spurn Head	42	34	39·6	34·4	37·1	− 1·6	0	34	2	0·05	− 0·34	*	*	*	*
	Fulbeck (Lincolnshire)	—	? 30	—	? 33·1	—	—	—	—	2	0·05	− 0·37	8·2	—	16	—
3. ENGLAND, E.	Hillington Ⓜ	38	25	35·3	30·2	32·9	− 4·2	0	64	3	0·16	− 0·35	11·0	+ 1·2	21	+ 2
	Yarmouth	42	32	38·0	33·4	35·8	− 2·0	0	43	1	0·02	− 0·48	*	*	*	*
	Geldeston	40	31	36·8	32·0	34·5	− 3·9	0	53	2	0·02	− 0·41	13·1	+ 1·8	25	+ 3
	Cambridge	39	23	36·1	28·6	32·5	− 5·2	0	67	1	0·03	− 0·34	5·3	− 4·7	10	− 9
	Felixstowe	40	31	37·1	33·1	35·2	− 3·4	0	48	1	0·06	—	11·1†	—	21†	—
	Rothamsted	44	25	35·5	28·7	32·2	− 5·4	0	69	3	0·07	− 0·48	9·1	− 0·9	17	− 2
	Shoeburyness	41	26	37·1	31·7	34·5	− 4·5	0	53	1	0·04	− 0·33	*	*	*	*
4. MIDLAND COUNTIES	Harrogate	40	23	35·2	28·5	32·0	− 5·1	0	70	1	0·06	− 0·58	6·8	—	13	—
	Bawtry (Hesley Hall)	42	20	35·6	29·1	32·5	− 5·2	0	67	2	0·08	− 0·37	*	*	*	*
	Nottingham	43	27	35·7	30·6	33·3	− 4·7	0	61	3	0·03	− 0·54	9·0	—	17	—
	Loughborough	43	23	36·4	29·8	33·2	− 4·7	0	62	3	0·06	− 0·44	*	*	*	*
	Colly Weston (Stamford)	42	26	36·3	29·6	33·1	− 4·1	0	62	1	0·02	− 0·44	*	*	*	*
	Cheadle Ⓜ	37	26	33·6	28·4	31·1	− 6·0	0	76	2	0·05	− 0·62	*	*	*	*
	Birmingham (Edgbaston)	39	26	33·9	29·1	31·6	− 6·7	0	73	1	0·03	− 0·47	0·6	—	1	—
	Shrewsbury	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hereford Ⓜ	45	24	34·7	28·1	31·5	− 7·2	0	74	1	0·15	− 0·41	*	*	*	*
	Cirencester	44	24	35·6	27·3	31·6	− 6·1	0	73	2	0·08	− 0·56	6·8	− 3·2	13	− 6
	Oxford	44	24	35·7	28·7	32·3	− 6·4	0	68	1	0·03	− 0·44	7·7	− 2·2	14	− 4
5. ENGLAND, S.	London	44	27	37·1	30·1	33·7	− 5·8	0	58	4	0·14	− 0·32	1·2‡	− 3·9‡	2‡	− 7‡
	Swarraton (Alresford) Ⓜ	44	20	34·1	25·4	29·9	− 8·0	0	85	2	0·08	− 0·61	*	*	*	*
	Dungeness	45	24	37·0	29·4	33·4	− 6·8	0	60	1	0·02	− 0·42	13·8	—	25	—
	Hastings (St. Leonards)	44	23	35·7	28·7	32·3	− 7·9	0	68	2	0·04	− 0·59	14·0	+ 0·7	26	+ 1
	Southampton	46	24	36·8	28·4	32·8	− 7·5	0	64	2	0·10	− 0·60	7·1	− 4·1	13	− 8
	Portland Bill	47	27	38·7	30·9	35·0	− 7·0	0	49	3	0·10	—	*	*	*	*
	Shaftesbury Ⓜ	44	18	36·6	25·6	31·3	− 6·2	0	75	3	0·22	− 0·48	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	43	25	40·6	32·5	36·7	− 3·8	0	37	0	0·00	− 2·01	*	*	*	*
	Glasgow	39	25	37·4	31·2	34·4	− 4·2	0	53	0	0·00	− 0·93	0·0	− 4·6	0	− 10
	Cally Ⓢ	40	20	36·9	29·3	33·3	− 5·4	0	61	1	0·11	− 1·03	*	*	*	*
	Aspatria	39	26	36·8	30·8	33·9	− 4·7	0	57	1	0·08	—	16·1	—	32	—
	Douglas (Isle of Man)	43	34	39·1	35·6	37·4	− 3·8	0	32	1	0·06	− 0·97	0·3	− 9·7	1	− 19
7. ENGLAND, N.W.	Newton Rigg	39	22	35·4	27·7	31·7	− 4·9	0	72	1	0·17	—	16·4	—	33	—
	Stonyhurst	40	28	35·8	31·2	33·6	− 4·3	0	59	1	0·07	− 0·95	6·9	+ 0·2	14	0
	Blackpool Ⓜ	39	22	36·1	29·5	32·9	− 6·2	0	64	1	0·07	− 0·61	1·9	− 4·9	4	− 10
	Manchester (Prestwich)	39	25	35·9	29·1	32·6	− 5·8	0	66	2	0·04	− 0·76	0·2	—	0	—
	Liverpool Obsy. (Bidston)	43	27	36·1	30·6	33·5	− 6·3	0	60	1	0·03	− 0·52	5·4	—	10	—
	Chester (Hawarden Bridge)	45	23	36·9	29·7	33·4	− 7·1	0	60	1	0·07	—	*	*	*	*
	Llandudno Ⓜ	43	26	38·2	30·5	34·5	− 7·3	0	53	1	0·24	− 0·42	6·3	− 2·9	12	− 6
	Holyhead	47	28	38·0	30·6	34·5	− 8·1	0	53	1	0·15	− 0·65	*	*	*	*
	Bettws-y-Coed	44	20	36·9	27·2	32·2	− 9·4	0	69	1	0·10	—	1·6	—	3	—
8. ENGLAND, S.W.	Llandovery	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
	Pembroke	49	29	40·4	32·3	36·5	− 7·0	0	39	2	0·32	− 0·57	3·3	− 7·7	6	− 14
	Clifton	47	26	36·5	29·9	33·3	− 6·5	0	61	1	0·06	− 0·70	*	*	*	*
	Bath	47	24	36·3	28·4	32·5	− 7·4	0	67	2	0·09	− 0·59	2·0	—	4	—
	Arlington (N. Devon)	46	22	36·9	27·9	32·6	− 7·6	0	66	1	0·16	− 1·06	*	*	*	*
	Cullompton Ⓜ	47	26	36·3	28·4	32·5	− 7·2	0	67	2	0·24	− 0·57	1·2	− 8·2	2	− 15
	Falmouth	48	31	43·4	36·4	40·0	− 4·1	4	21	2	0·49	− 0·71	0·0	− 12·8	0	− 23
	Plymouth	50	29	40·2	32·7	36·6	− 6·0	0	38	2	0·30	− 0·60	2·2	− 9·2	4	− 17
9. IRELAND, N.	Malin Head	43	30	38·0	32·9	35·6	− 6·1	0	45	1	0·04	− 0·62	*	*	*	*
	Edenfel (Omagh)	46	26	37·3	30·1	33·8	− 4·1	0	57	2	0·59	− 0·24	*	*	*	*
	Blacksod Point	47	33	40·4	35·3	38·0	− 5·1	0	28	2	0·52	− 0·73	*	*	*	*
	Markree Castle	44	22	38·7	27·9	33·5	− 6·1	0	60	2	0·43	− 0·49	11·0	+ 2·4	22	+ 5
	Armagh	43	27	39·0	32·2	35·7	− 3·4	0	44	2	0·47	− 0·17	5·7	− 3·8	11	− 7
	Donaghadee	47	37	41·4	38·1	39·8	− 1·1	0	15	1	0·25	− 0·40	*	*	*	*
10. IRELAND, S.	Dublin	47	28	41·5	34·5	38·1	− 3·6	0	27	1	0·43	− 0·09	5·4	− 7·2	10	− 14
	Birr Castle	47	25	40·3	29·6	35·2	− 4·7	0	48	2	0·27	− 0·41	8·2	− 2·6	16	− 5
	Kilkenny	48	25	40·4	30·7	35·7	− 5·1	0	44	3	0·88	+ 0·12	*	*	*	*
	Waterford	49	29	41·0	33·4	37·4	− 3·9	0	32	2	0·72	− 0·29	*	*	*	*
	Roche's Point	49	33	45·4	38·0	41·9	− 2·0	10	18	5	0·63	− 0·57	*	*	*	*
	Valencia	50	33	46·3	37·6	42·1	− 3·0	19	12	6	1·16	− 0·25	10·4	− 0·6	20	− 2
	Killarney	46	30	43·1	34·0	38·7	− 4·7	3	30	3	0·15	− 1·39	*	*	*	*
	Foynes	45	28	40·4	29·9	35·4	− 6·3	0	46	2	0·63	− 0·30	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	52	36	46·3	38·9	42·8	− 3·8	19	9	5	0·36	− 0·51	0·0	− 13·1	0	− 23
	Jersey	45	28	38·7	33·1	36·0	− 7·3	0	42	2	0·08	− 0·72	11·0	− 3·6	19	− 6

Stations Marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An Asterisk is inserted in all places for which the information is not usually received.

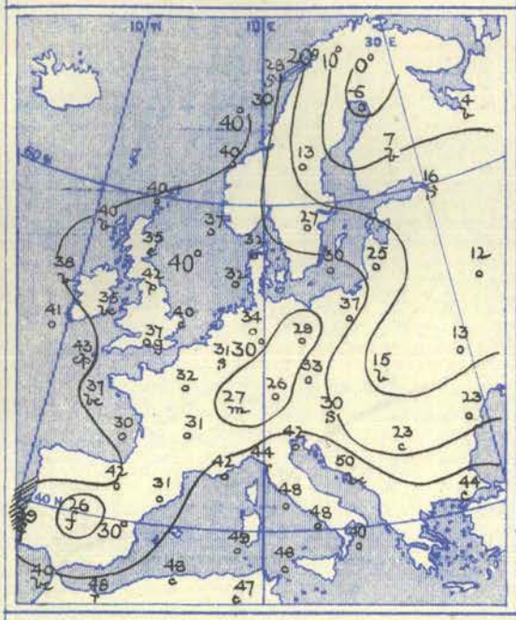
† The Sunshine values at Felixstowe are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. Reports of Bright Sunshine at 32 additional stations will be found in a Table on the last page of this issue.

‡ For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Wesleyan Training College, Westminster.

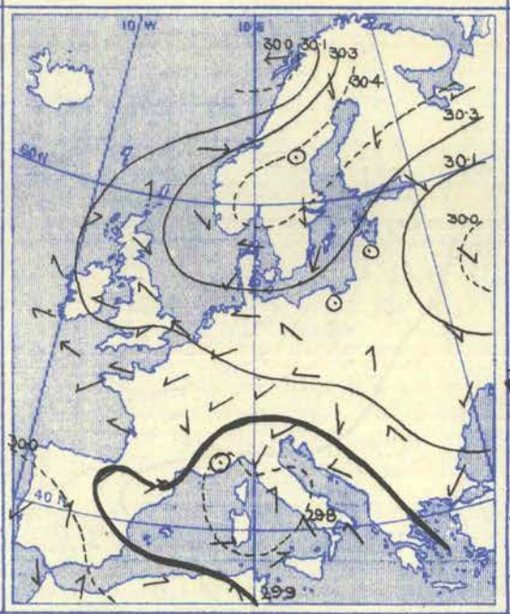
NOTE.—The Bright Sunshine values entered to Fulbeck are recorded at Rauceby; those entered to Dungeness at Littlestone-on-Sea, and those entered to Liverpool at Hoylake.

Sunday, 27th December, 1903.

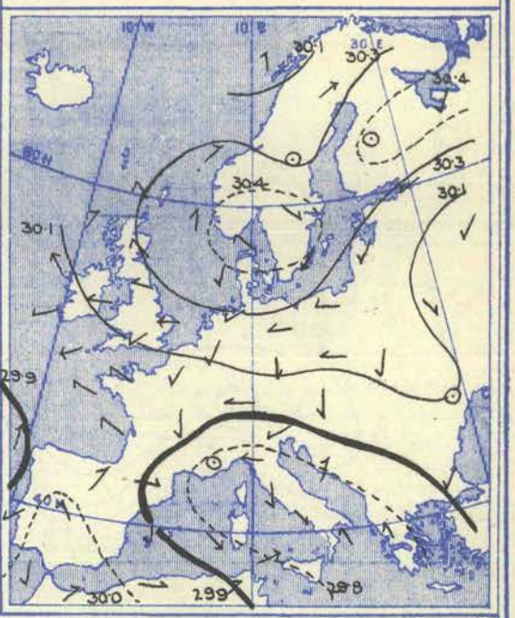
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m fine and bright in Finland and at some of our own north-western stations, but very cloudy or overcast over our area as a whole. Snow falling at Brussels, St. Petersburg, and Vienna, sleet or rain in the western part of the English Channel, fog prevailing at Madrid and Lisbon, and rain at Oran, Bilbao, Cape Sicié, and in the north of Italy. Amounts of rain or snow not generally large during day, but 0·5 in. measured at Bodö and 1·0 in. at Athens.

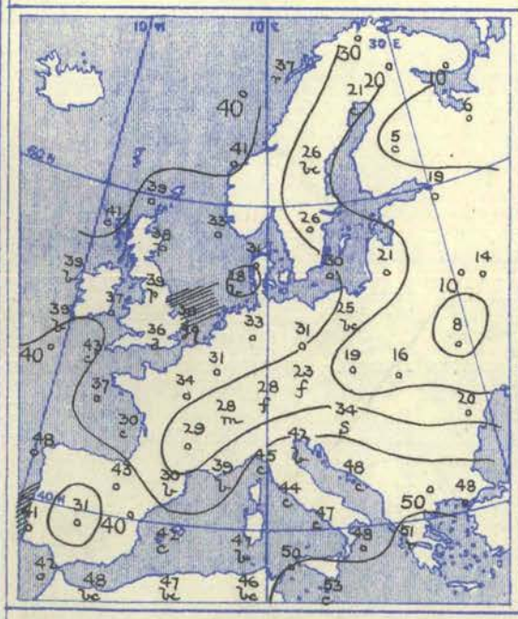
Temperature changed irregularly. Morning readings ranging from 50° at Lésina and a few degrees lower on most shores of the Mediterranean, to below 30° over Europe as a whole, and to below 20° over Russia and the north of Sweden. Lowest values, 12° at Moscow, 4° at Archangel, and −6° at Haparanda. Lowest reading in our Islands, 29° at Nairn. Rising during day to about 60° at a few stations in the far south, but not touching 40° over the greater portion of our area, and remaining below 32° in most of the more northern regions, as well as at Belfort. Sharp frost over central Ireland and Scotland by night.

Wind at 8 a.m. showing a complete cyclonic movement around the Islands of Sardinia and Corsica and partial cyclonic circulations over central Russia and the north-west of Norway. Anticyclonic in all other regions; light or moderate in force generally, but North-Easterly wind blowing strongly at Wisby. No general change later, but a strong South-Westerly breeze setting in at Haparanda and fresh or strong Westerly or North-Westerly breezes in the central part of the Mediterranean.

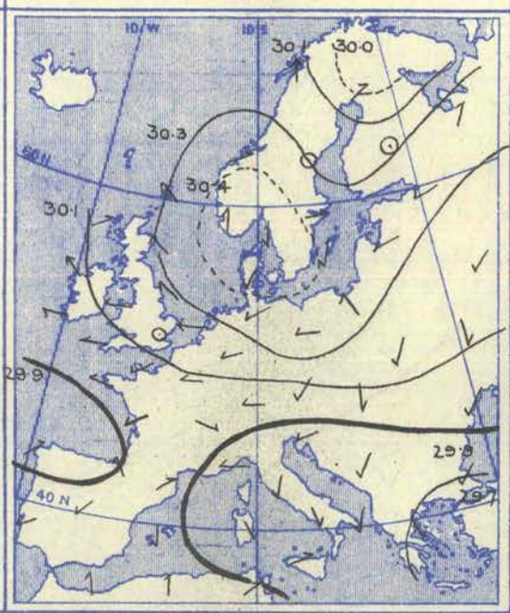
Barometer at 8 a.m. ranging from above 30·4 ins. in an anticyclone centred over Sweden and Finland, and extending with decreasing intensity to the United Kingdom, to below 30·0 ins. (1) in a depression over central Russia, and (2) in another off the north-west of Norway, and to below 29·8 ins. in a third system of irregular shape embracing part of Italy and the adjacent Islands. Disturbances all moving in an easterly direction later, and a fresh system approaching Spain. Anticyclone tending to move southwards and westwards.

Monday, 28th December, 1903.

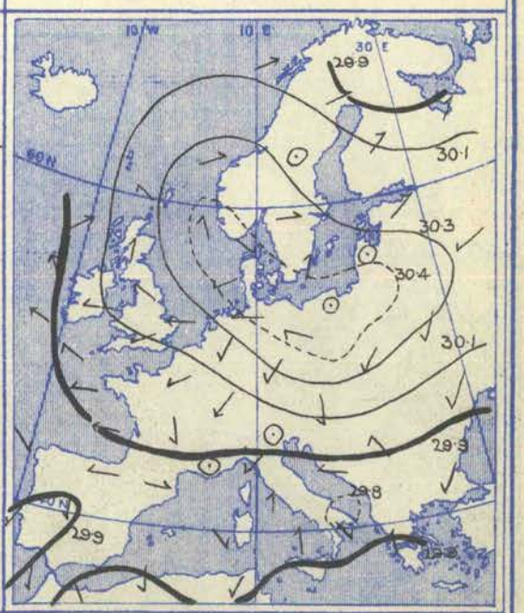
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. overcast or cloudy as a whole, but fine and bright in the west of Ireland, the Riviera, and at some Algerian stations. Rainy at Patras, Pesaro, and Bodö, and showery in various parts of Great Britain; snow falling at Buda-Pesth, and fog prevalent at Limoges, Munich, and Prague. As much as 1·1 ins. of rain falling at Constantinople later, and 0·7 in. at Naples, but very little or none over our area as a whole.

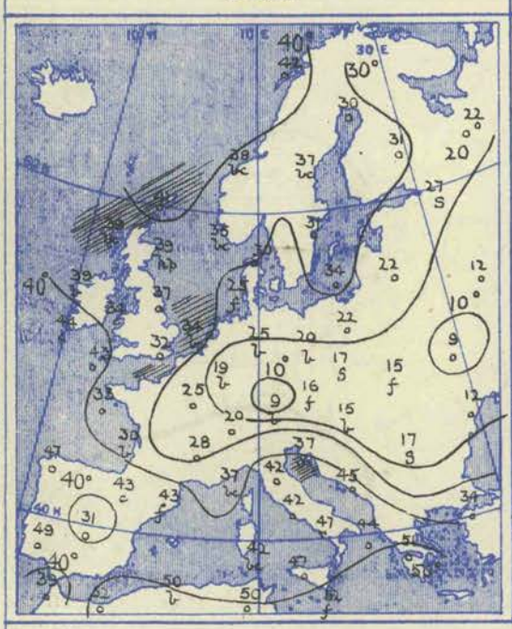
Temperature risen quickly in the extreme north and fallen quickly in East Prussia and Bohemia; changed but little elsewhere. Morning readings highest, 53° at Malta and about 50° at a few other stations in the far south. Lowest, (1) 5° at Kuopio, 6° at Archangel, 8° at Kiev, 16° at Cracow, (2) 19° at Limoges, (3) 33° at Nairn, and (4) 31° at Madrid. Maxima during day, 63° at San Fernando and 59° at Palermo and at some Algerian stations, but thermometer continuing very low over Europe generally—maxima at Lemberg and Cracow 16° and 19° respectively. Frost again experienced in several parts of the British Islands at night.

Wind at 8 a.m. anticyclonic over our area as a whole, but partial cyclonic circulations prevailing in the extreme north and south-east, as well as over the Bay of Biscay and its neighbourhood. Very little strength generally, but Easterly current strong at Yarmouth. Very little change in direction later, but force increasing over England and the Channel, and a moderate gale from South-South-West setting in in the Hebrides.

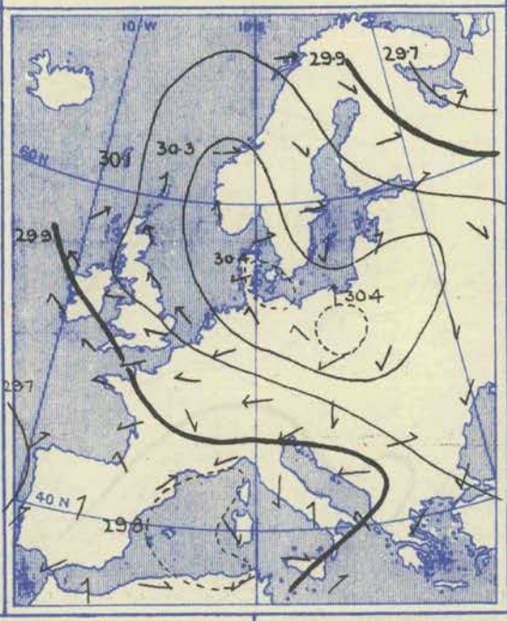
Barometer in morning ranging from above 30·4 ins. in an extensive anticyclone having its centre over Denmark and the adjacent parts of Scandinavia, to below 30·0 ins. in a depression over Lapland, to less than 29·8 ins. in another disturbance off the north-west of Spain, and to less than 29·7 ins. in a third over Greece and Asia Minor. Anticyclone spreading out in an east-south-easterly direction later, and barometer falling rather decidedly along the west and north-west coasts of the United Kingdom.

Tuesday, 29th December, 1903.

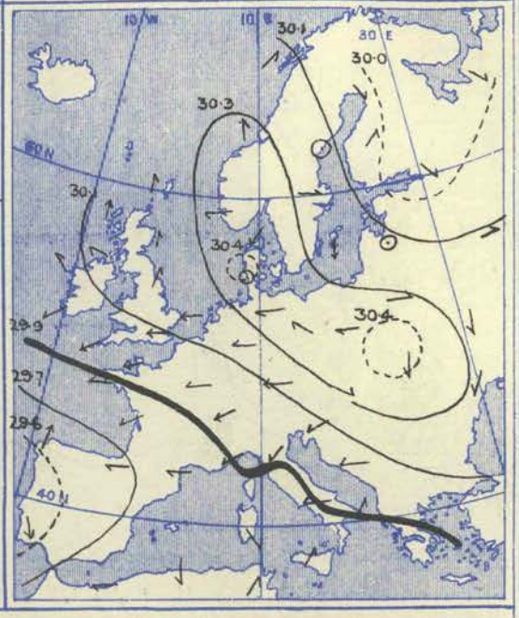
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. cloudy or dull very generally, but fair in most Scotch localities. Snow falling at St. Petersburg, Breslau, and Hermanstadt, showers of hail at Aberdeen, and rain at Oporto and at several Italian stations. Conditions remaining dry in most regions, but heavy rain experienced at Lisbon and very heavy snow in Finland (1·7 ins. at Hangö).

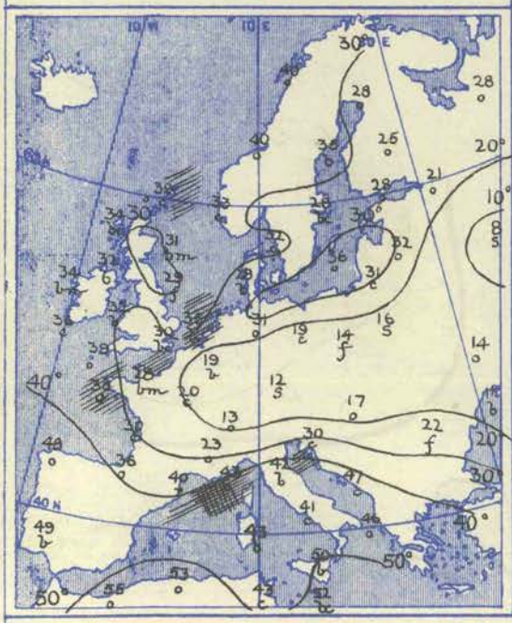
Temperature risen over Finland, Sweden, and northern Russia, fallen in most other regions—quickly in Germany. Morning readings highest, 52° at Malta and Nemours, 51° in Greece, 49° at Lisbon, and 47° at Corunna. Lowest, (1) 9° at Kiev and Munich, 12° at Odessa, 14° at Warsaw, and 21° at Limoges, (2) 20° at Karlstad, (3) 31° at Madrid, (4) 31° at Nottingham. Rising subsequently to 64° at Nemours, 63° at La Calle, and to 60° at Palermo, but maxima low generally. Severe frost continuing all day over the central parts of the Continent.

Wind anticyclonic generally, but an irregular cyclonic circulation shown over the western portion of the Mediterranean, and partial cyclonic movements prevailing over the Bay of Biscay and the extreme north of Europe. Easterly current fresh or strong in Bavaria and on our southern coasts, South-Westerly wind strong in the Hebrides, and Westerly wind strong at Bodö. No important change later.

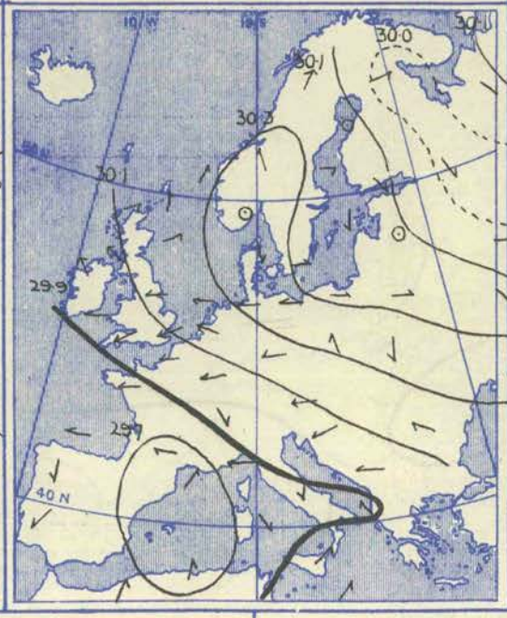
Barometer at 8 a.m. ranging from 30·4 ins. over Denmark and north Germany in the central portion of a very large anticyclone to 29·8 ins. and less in a shallow depression with its centre between the south of France and Algeria, to less than 29·7 ins. in a depression over the White Sea and also in a system off the north-west of the Spanish Peninsula. Last mentioned system spreading eastwards later, and that over White Sea disappearing. Anticyclone extending south-eastwards.

Wednesday, 30th December, 1903.

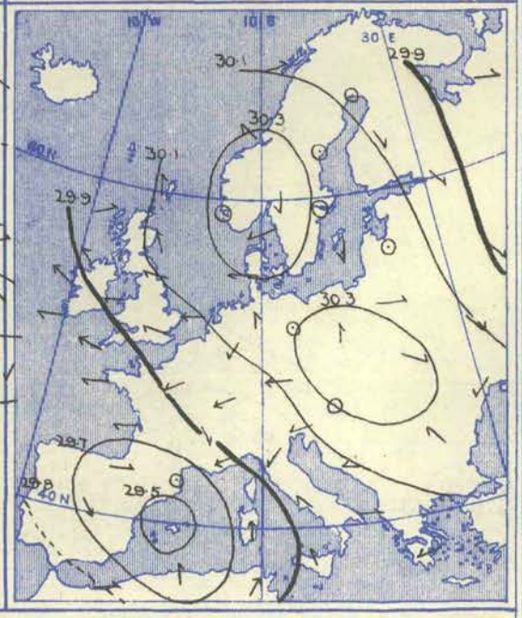
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at 8 a.m. fine and bright over the United Kingdom, the Netherlands, the west of Germany, and the south of Sweden; cloudy or dull in nearly all other places. Snow falling at St. Petersburg and rain at Perpignan. Some moderate falls of rain occurring in Italy and Spain later, and some extremely heavy falls in the south of France—as much as 3·3 ins. at Cette and 2·6 ins. at Perpignan.

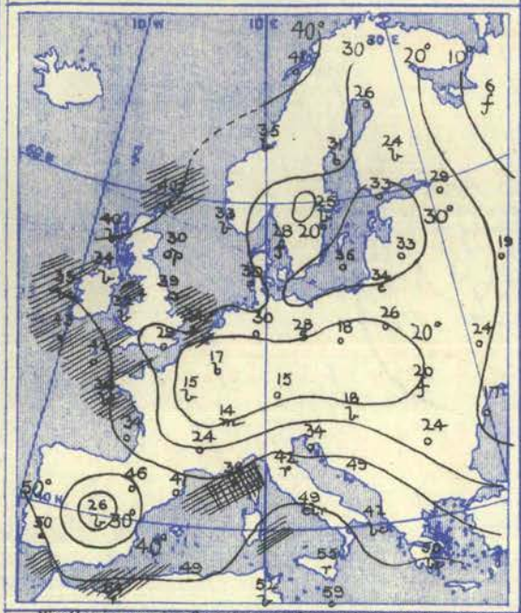
Temperature changed rather irregularly, but fallen as a whole. Readings at 8 a.m. highest, 55° at Nemours, 52° at Malta, 49° at Lisbon, and 40° on the west coast of Norway. Lowest, 6° at Nicolaieff, 8° at Moscow, 10° at Lemberg, 9° at Prague, 13° at Belfort, 19° at Brussels, and 20° at Paris. Lowest in the United Kingdom, 20° at Nairn and 26° at Oxford. Frost continuing all day in most Continental regions, but thermometer rising to 35° or above at nearly all our own stations, and to above 50° on the shores of the Mediterranean. Highest values, 61° at Algiers and 68° at La Calle.

Wind at 8 a.m. anticyclonic very generally, but a cyclonic circulation existing over the Spanish Peninsula and the adjacent part of the Mediterranean. Little force as a whole, but Easterly winds fresh or strong over our own southern and western districts. No change in direction during day, but some increase in strength taking place over our Islands and also over the western portion of the Mediterranean.

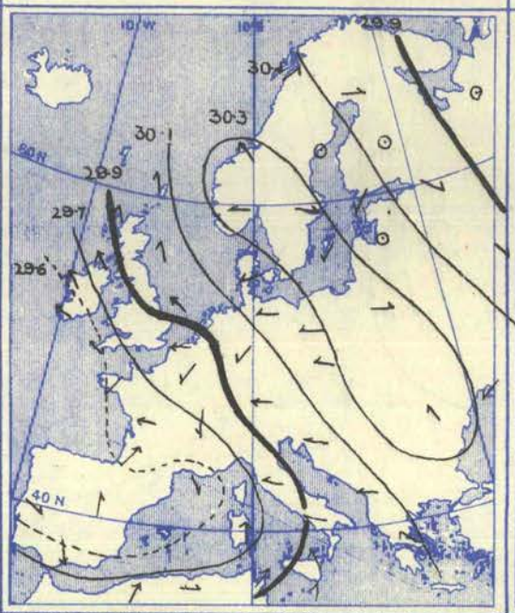
Barometer at 8 a.m. ranging from 30·3 ins. and upwards in an irregularly shaped anticyclonic band, stretching from Christiansund southwards to Cuxhaven and thence to Odessa, to 30·10 ins. at Archangel, and to below 29·7 ins. in a depression over the east of Spain. Latter system increasing in depth later in day, and pressure also giving way decidedly in central and eastern Russia and along our own western coasts.

Thursday, 31st December, 1903.

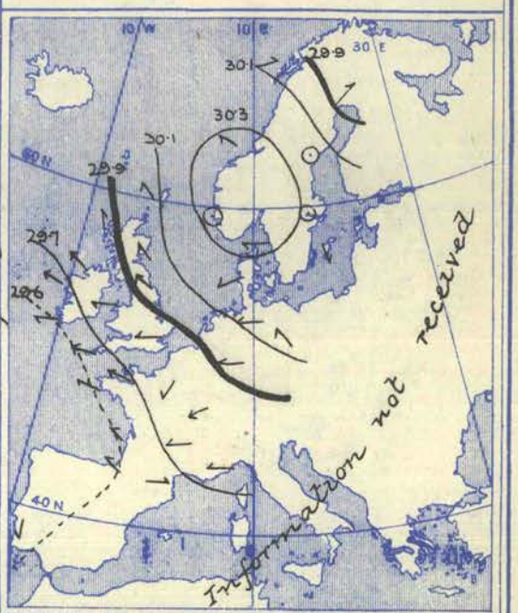
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine at some of our western and northern stations, in the north of France, the Low Countries, and over a considerable portion of Scandinavia; generally dull and overcast elsewhere, with showers at Aberdeen, rain over the south of France, north Italy, Sicily, and western Algeria, and snow at Berlin, Cape Gris Nez, and Turin. A thunderstorm at Rome. Mist or fog at various scattered stations on the Continent. During the day rain falling at only a few places in our Islands and in the south of France.

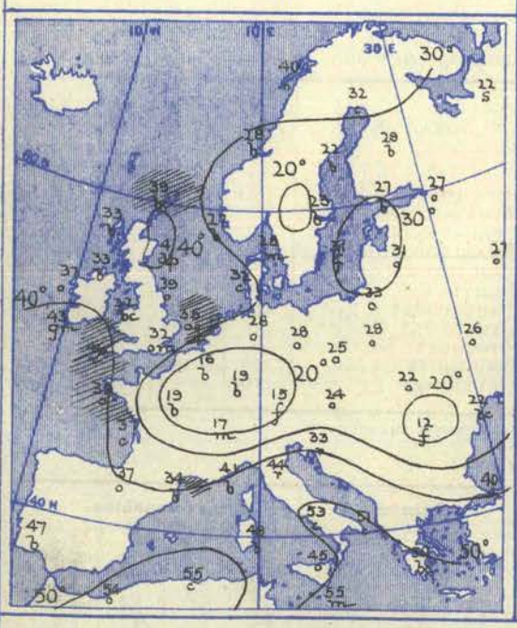
Temperature at 8 a.m. fallen in the extreme south-east of England, north-eastern France, the Low Countries, and the greater part of Scandinavia and northern Russia; risen nearly everywhere else, briskly in places. Highest readings, 59° at Malta, 55° at Palermo, Cagliari, and Oran, and 54° at Nemours; 43° at Valencia and Roche's Point, 42° at Scilly, and 41° at Bodö. Lowest, 26° at Madrid, 25° at Dungeness, and below 20° at many Continental stations, 15° at Paris and Munich, 14° at Belfort and Prague, and 6° at Archangel. Rising later to 52° at Biarritz and Lisbon, 51° at Perpignan, 46° at Nice and Scilly, and 45° at Valencia and Rochefort, but not passing above 32° in many localities, 30° at Oxford, Paris, Heider, Frankfort and Stockholm, 21° at Belfort and Munich.

Wind in morning from some Westerly direction over south-western Europe and north Africa. Northerly to Westerly over eastern and north-eastern Europe, and Easterly to South-Easterly over the remainder of our area. A fresh or strong breeze felt on many parts of our coasts and at a few Continental and African stations, a moderate gale at Nice. Calms and light breezes prevailing in most countries. No important change of direction or force reported afterwards.

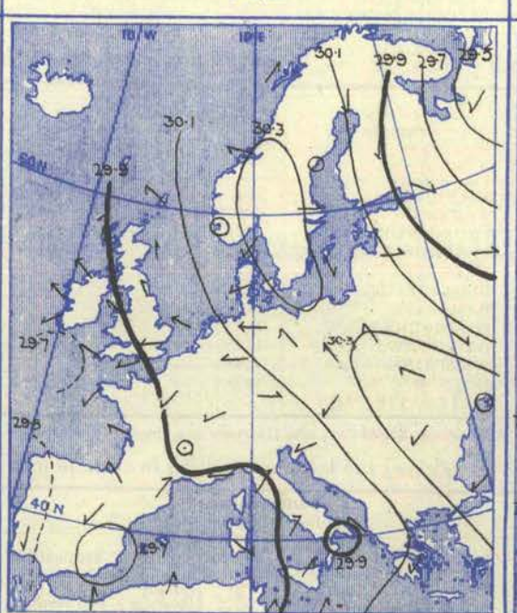
Barometer at 8 a.m. highest, 30·3 ins. to 30·4 ins. in the central space of an anticyclone extending south-eastward from the Norwegian coast to the Black Sea. Lowest, below 29·6 ins. in a very irregularly shaped area lying outside our south-western coasts, extending southward to Portugal and thence eastward across Spain into the western basin of the Mediterranean; below 29·9 ins. over the north-east of Russia. Hardly any variations of pressure occurring over western and north-western Europe up till evening.

Friday, 1st January, 1904.

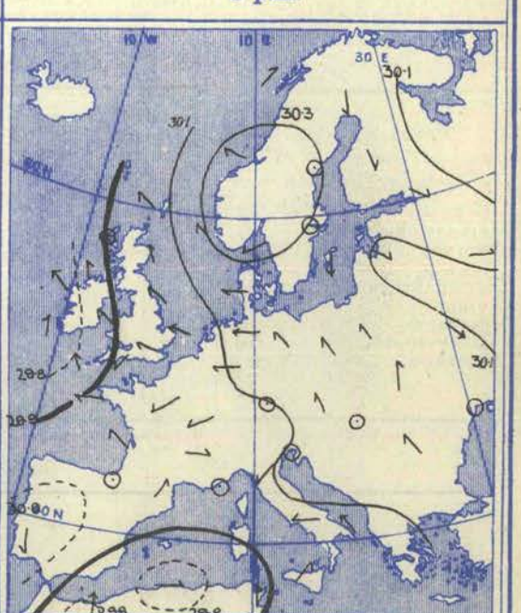
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather at a.m. fine and bright in a few isolated regions, but cloudy or overcast as a whole. Rainy at Aberdeen, Madrid, Florence, and Trieste, sleet falling at Pembroke, and snow at Archangel. Fog or mist prevailing in places. Slight rain later at a few of our own stations, and heavy rain in Algeria and at Brindisi.

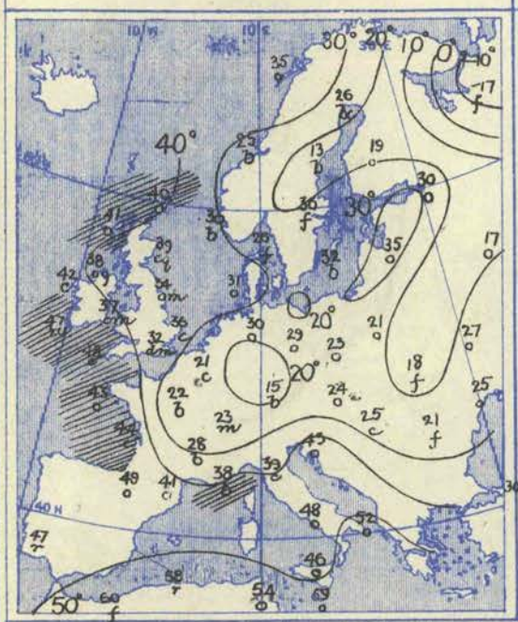
Temperature fallen in Scandinavia, risen in almost all other localities. Morning readings highest, 55° at Malta and Algiers, and 51° at Brindisi. Lowest, (1) 11° at Nicolaieff, (2) 14° at Karlstad, (3) 16° at Brussels, 19° at Frankfurt, 15° at Munich, and 17° at Belfort, (4), 29° at Liverpool and Bath. Rising later to 52° at Scilly, 54° in the south of France, 60° at Brindisi, 62° at Malta, and 64° at Nemours and La Calle. Frost continuing throughout the day at most stations in central and northern Europe, and thermometer only rising to 32° in London and at Oxford.

Wind light and anticyclonic in Scandinavia and in a long band stretching thence to south-eastern Europe. Complete or partial cyclonic circulations prevailing around the Bay of Biscay, the south of Spain, the south of Italy, and the north of Russia. South-Easterly or Easterly winds fresh or strong at some of our own stations, but little force elsewhere. Veering towards South later in several parts of the United Kingdom.

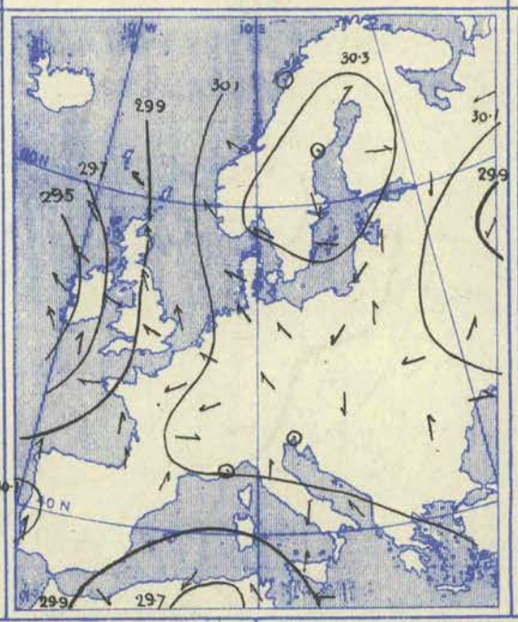
Barometer at 8 a.m. ranging from 30·3 ins. or above in a large anticyclonic band extending from the north of Scandinavia to the Black Sea, to less than 29·9 ins. in a small minimum near Brindisi, to about 29·7 ins. in other systems over Spain and off the south of Ireland, and to 29·46 at Archangel. Pressure giving way later on our north-western and northern coasts, and rising over France and on our southern and south-western coasts. Spanish depression moving south-eastwards to Algeria.

Saturday, 2nd January, 1904.

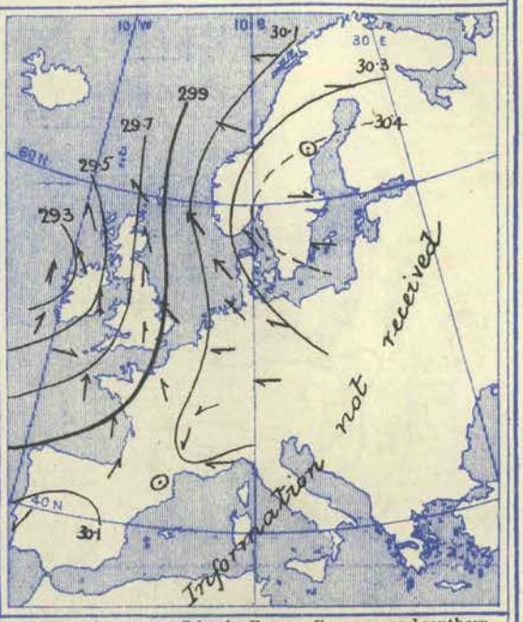
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and clear in the Hebrides, the eastern half of France, and western Germany, the south of Norway, and round the Gulf of Bothnia; elsewhere mostly dull and overcast, with rain at Valencia and in London, on the Portuguese coast and at Algiers; snow at Nottingham. Mist locally on our own and the French coasts, fog at various stations in eastern and northern Europe. Rain falling subsequently in nearly all parts of the British Isles and the west of France, from 0·5 in. to 0·9 in. in the south and west of Ireland. Lightning seen at Parsonstown at night.

Temperature at 8 a.m. fallen on the north-east coast of Britain, western Italy, eastern, central, and far northern and north-eastern Europe, risen elsewhere; the changes in some cases very decided. Highest readings, 60° at Nemours, 59° at Malta, 58° at Algiers, 48° at Scilly, 47° at Roche's Point and Valencia, 35° at Bodö. Lowest, 22° at Paris, below 20° in western Germany, 13° at Hernösand, 10° at Uleaborg, and −17° at Archangel. Maxima recorded during day over western Europe, 55° at Biarritz, 54° at Nice, 51° at Scilly, 50° at Valencia, 28° at Haparanda and Frankfort, and 25° at Munich.

Wind in morning Southerly to South-Easterly over our Islands, France, Germany, and southern Scandinavia, a fresh or strong breeze at several of our coast stations, a moderate gale in the south-west. A Westerly gale at Oran, and North-Easterly at Algiers, calms and light variable breezes over the rest of our area. An increase in force occurring in the course of the day in the Southerly to South-Easterly current in many parts of our Islands and on the eastern shores of the North Sea, a fresh gale at some western stations, a fresh to strong gale in the north of Scotland.

Barometer at 8 a.m. highest, above 30·3 ins. in the central space of an anticyclone occupying a greater part of Scandinavia and Finland, the area extending southward to Turkey; and above 30·1 ins. on the coast of Portugal. Lowest, below 29·5 ins. in the west of Ireland, 29·6 ins. in the interior of Algeria, and below 29 ins. in the east of Russia. By evening the Scandinavian anticyclone increasing in intensity, with readings up to nearly 30·5 ins., and the disturbance on our western coasts deepening, the barometer being down to 29·25 ins. at Blacksod Point.

IV.—GENERAL NOTES, etc.

The distribution of pressure during this period remained very constant, with the barometer highest in an anticyclone, which at first lay over Scandinavia, and subsequently extended southwards across central to the south-eastern countries of Europe. Cyclonic systems were observed both to the eastward and westward of the anticyclonic band, but, although sometimes large, they were not, as a rule, of any great depth, so that the Westerly and Northerly winds that generally prevailed over Russia and Finland never reached the force of a gale, and the South-Easterly and Easterly winds which were prevalent over the United Kingdom and its neighbourhood only occasionally blew strongly. By Saturday, however, when a depression was approaching nearer our north-western coasts, the wind veered to the Southward over our Islands generally and increased to a moderate to strong gale on many parts of our western and northern coasts. The general character of the weather was very dry, but some baric minima over the Mediterranean occasioned considerable falls of rain on the coasts of Algeria, Italy, and the south of France. Severe and continuous frost was experienced in nearly all continental regions, and the thermometer was frequently many degrees below the freezing point over the United Kingdom, where, too, the daily maxima were usually very low. With the advent of the Southerly wind at the end of the period, temperature was rising slowly throughout the British Islands, as well as along the western seaboard of the Continent.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 308.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible Duration	Difference from the Mean for the Week.
DEERNESS	3·3	− 2·5	8	− 6
STRATHPEFFER SPA	11·1	+ 3·9	25	+ 9
EDINBURGH	0·0	− 6·2	0	− 13
COCKLE PARK	0·2	—	0	—
NEWCASTLE-ON-TYNE	0·0	—	0	—
YORK	4·3	− 1·4	9	− 3
CROMER	12·4	—	24	—
LOWESTOFT	11·0	—	21	—
DUNMOW	10·5	—	20	—
SHEFFIELD	3·1	—	6	—
WORKSOP	8·8	+ 1·2	17	+ 2
THURCASTON	7·7	− 0·1	15	0
TUNBRIDGE WELLS	13·5	—	25	—
MARGATE	15·0	+ 4·6	28	+ 9
BROADSTAIRS	—	—	—	—
RAMSGATE	12·2	—	23	—
EASTBOURNE	11·3	− 1·0	21	− 2
BRIGHTON	10·8	− 0·6	20	− 1
WORTHING	12·3	—	22	—
BOGNOR †	13·3†	—	24†	—
WATERGATE PARK	—	—	—	—
WESTBOURNE †	10·1†	− 1·8	18†	− 3
VENTNOR HOSPITAL	2·2	− 8·9	4	− 16
BOURNEMOUTH	—	—	—	—
MARLBOROUGH	5·3	− 3·3	10	− 6
SOUTHPORT	1·3	—	4	—
RHYL	4·6	—	9	—
ABERDOVEY †	11·5†	—	22†	—
TENBY	2·3	− 9·2	4	− 17
TORQUAY	—	—	—	—
NEWQUAY	0·9	− 10·7	2	− 20
GUERNSEY †	9·0†	− 2·0	16†	− 4

† The values at Bognor, Westbourne, Aberdovey, and Guernsey are obtained by Jordan's Photographic Recorder.

Reports received too late for insertion in their proper places.

REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from the Mean for the Week.	Accumulated Heat for the Week (in Day Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Days with Rain.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of Possible duration.	Difference from the Mean for the Week.
Week ending Dec. 12th, 1903.	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	4·2	—	8	—
" " " "	Tenby	—	—	—	—	—	—	—	—	—	—	—	13·6	+ 2·9	25	+ 5
" " 19th, "	Broadstairs	—	—	—	—	—	—	—	—	—	—	—	9·0	—	17	—
" " " "	Tenby	—	—	—	—	—	—	—	—	—	—	—	1·3	− 8·4	3	− 16
" " " "	Cromer	—	—	—	—	—	—	—	—	—	—	—	4·9	—	9	—
" " 26th, "	Cromer	—	—	—	—	—	—	—	—	—	—	—	0·1	—	0	—

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1903.

VOL. XX. APPENDIX I.] *New Series.* FIRST QUARTER—JANUARY TO MARCH. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE FIRST QUARTER OF THE THIRTY-EIGHT YEARS, 1866 TO 1903.

YEARS.	Principal Wheat-producing Districts.														Principal Grazing Districts.												Channel Islands.		Means for Districts 1-10 combined.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.					
	Days.	Ins.	Days	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.
RAINFALL.																														
Means for 5 years, 1866-1870.	—	12·6	—	9·6	—	5·4	—	5·7	—	6·9	—	8·5	—	7·2	—	12·6	—	11·8	—	13·7	—	11·8	—	11·0	—	12·2	—	—	—	9·7
1871-1875	—	9·1	—	7·8	—	4·9	—	4·4	—	6·6	—	7·1	—	6·2	—	11·1	—	10·4	—	13·7	—	9·5	—	10·5	—	11·0	—	—	—	8·6
1876-1880	—	9·5	—	7·2	—	5·3	—	5·7	—	6·2	—	7·2	—	6·3	—	11·2	—	9·5	—	9·9	—	9·2	—	10·0	—	10·0	—	—	—	8·2
1881-1885	65	9·9	49	6·2	45	5·2	44	5·1	45	6·4	43	6·4	45	5·9	58	12·5	50	8·8	53	9·7	61	9·4	58	11·9	56	10·5	57	8·2	51	8·2
1886-1890	66	12·2	52	6·2	47	5·2	47	4·7	43	5·2	44	5·4	47	5·3	53	10·7	50	6·9	49	8·3	56	8·4	50	9·5	52	8·8	57	7·1	50	7·1
1891	65	14·7	38	5·1	43	3·7	43	3·8	37	4·1	38	5·8	40	4·5	47	9·2	35	4·4	38	6·8	49	5·5	42	5·6	42	6·3	43	6·2	41	5·4
1892	63	11·2	46	5·5	47	4·4	49	4·0	44	4·0	38	3·7	45	4·3	47	8·0	46	6·3	47	6·4	49	5·9	45	7·6	47	6·8	52	6·9	47	5·6
1893	65	12·8	51	5·9	44	4·5	49	5·2	48	5·0	48	5·9	48	5·3	57	10·0	49	6·4	49	8·7	59	7·8	50	8·7	53	8·3	56	7·3	52	6·8
1894	68	21·1	56	11·0	51	5·4	47	4·2	54	5·8	49	6·3	51	6·5	64	18·6	56	9·9	56	10·5	64	12·3	61	10·9	60	12·4	56	7·7	56	9·5
1895	59	9·8	48	6·4	58	7·5	52	5·6	42	5·4	41	4·7	48	5·9	48	6·7	48	6·7	46	8·1	56	7·7	48	9·5	49	7·7	55	7·3	49	6·8
Means for 5 years, 1891-1895.	64	13·9	48	6·8	49	5·1	48	4·6	45	4·9	43	5·3	47	5·3	53	10·5	47	6·7	47	8·1	55	7·8	49	8·5	50	8·3	52	7·1	49	6·8
1896	68	17·8	50	4·8	39	4·1	47	4·9	45	4·3	42	4·4	45	4·5	61	12·1	53	8·3	50	6·9	56	9·2	51	8·8	54	9·1	53	4·9	50	6·8
1897	65	11·0	57	6·9	59	6·4	57	6·9	54	7·9	52	9·2	56	7·5	58	11·0	61	7·9	65	13·0	66	9·6	61	11·8	62	10·7	70	11·6	59	9·1
1898	77	18·7	52	4·8	44	3·4	41	3·5	39	2·9	37	3·5	43	3·6	62	10·5	50	7·3	48	6·0	61	7·8	44	6·6	53	7·6	56	4·4	48	5·6
1899	60	13·7	53	8·4	48	5·3	46	4·6	44	6·8	38	5·9	46	6·2	57	13·1	51	8·9	49	12·5	62	8·9	51	12·5	54	11·2	48	8·1	50	8·7
1900	66	11·7	54	8·8	54	7·8	55	7·5	50	8·6	50	9·3	53	8·4	54	12·2	52	9·2	56	13·5	60	8·2	56	9·9	55	10·6	65	12·4	54	9·5
Means for 5 years, 1896-1900.	67	14·6	53	6·7	49	5·4	49	5·5	46	6·1	44	6·5	48	6·0	58	11·8	53	8·3	54	10·4	61	8·7	53	9·9	56	9·8	58	8·3	52	7·9
1901	64	10·6	52	6·5	55	5·6	52	5·1	49	6·6	45	6·1	51	6·0	50	10·0	51	6·7	47	9·3	59	8·1	50	8·6	51	8·5	63	8·0	51	7·3
1902	68	14·6	50	4·7	41	3·7	42	3·2	38	4·6	35	4·9	41	4·2	60	13·3	53	6·5	47	7·6	63	8·7	49	9·1	54	9·0	51	6·0	48	6·6
1903	75	24·6	60	12·6	47	5·1	44	4·7	48	7·4	54	6·8	51	7·3	75	22·6	63	11·9	64	12·2	74	14·2	70	15·7	69	15·3	66	8·8	60	11·3
Means for 38 years, 1866-1903.	—	12·1	—	7·3	—	5·2	—	5·0	—	6·1	—	6·6	—	6·0	—	11·8	—	8·9	—	10·5	—	9·4	—	10·3	—	10·2	—	—	—	8·1
MEAN TEMPERATURE.																														
Means for 5 years, 1866-1870.	38°8		39°1		38°9		39°9		39°9		40°7		39°7		40°1		40°5		43°1		40°6		42°1		41°3		°		40°5	
1871-1875	40°2		40°0		39°7		39°9		40°5		41°2		40°3		40°8		41°6		44°0		41°6		43°7		42°3		—		41°3	
1876-1880	38°6		38°2		39°2		39°4		39°8		40°6		39°4		39°9		40°2		43°2		40°8		43°6		41°5		—		40°5	
1881-1885	38°8		38°9		39°4		39°8		39°9		41°4		39°9		40°2		40°5		42°7		41°3		43°1		41°6		44°9		44°8	
1886-1890	38°1		38°0		38°3		37°4		37°8		38°8		38°1		39°3		38°9		40°2		40°5		41°8		40°1		43°2		39°1	
1891	38°4		38°0		37°9		37°4		38°0		38°4		37°9		39°6		39°5		40°2		40°8		42°3		40°5		43°1		39°2	
1892	36°3		36°1		36°9		36°3		36°6		38°3		36°8		37°9		37°9		39°7		39°2		40°3		39°0		43°0		37°9	
1893	38°8		38°8		40°2		39°8		40°3		41°3		40°1		40°7		41°2		42°8		42°2		43°8		42°1		46°0		41°1	
1894	39°2		38°8		39°8		40°0		40°4		41°8		40°2		41°0		42°0		42°7		41°8		43°6		42°2		45°5		41°2	
1895	34°3		32°5		34°9		34°4		33°6		35°3		34°1		34°8		35°0		36°4		36°5		38°4		36°2		39°9		35°2	
Means for 5 years, 1891-1895.	37°4		36°8		37°9		37°6		37°8		39°0		37°8		38°8		39°1		40°4		40°1		41°7		40°0		43°5		38°9	
1896	40°9		40°4		41°2		40°9		41°4		42°7		41°3		42°3		42°5		43°9		43°4		45°5		43°5		46°7		42°4	
1897	37°5		37°4		39°4		39°8		39°8		41°7		39°6		39°5		40°4		42°5		40°6		42°8		41°2		45°7		40°4	
1898	40°1		40°3		41°1		40°5		40°7		42°2		41°0		42°0		42°1		43°0		42°7		44°3		42°8		45°8		41°9	
1899	38°4		38°0		40°3		41°1		40°7		42°7		40°6		40°6		41°8		43°4		41°7		43°8		42°3		46°8		41°5	
1900	36°6		35°9		37°6		38°1		37°8		39°9		37°9		38°2		38°6		40°7		39°0		40°1		39°3		44°6		38°6	
Means for 5 years, 1896-1900.	38°7		38°4		39°9		40°1		40°1		41°8		40°1		40°5		41°1		42°7		41°5		43°3		41°8		45°9		41°0	
1901	38°0		37°0		38°0		37°2		37°3		38°5		37°6		39°0		38°5		39°7		40°0		40°8		39°6		43°2		38°6	
1902	37°8		37°4		39°5		39°7		39°8		41°2		39°5		39°7		40°2		42°1		41°2		43°2		41°3		45°3		40°4	
1903	39°7		39°7		42°2		43°3		42°4		44°1		42°3		42°0		42°9		44°6		42°4		44°3		43°2		47°0		42°8	
Means for 38 years, 1866-1903.	38°6		38°5		39°1		39°2		39°4		40°6		39°4		40°0		40°2		42°3		40°9		42°8		41°2		—		40°3	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE THIRTY-EIGHT YEARS, 1866 TO 1903.

		Wheat Districts.	Grazing Districts.	Wheat and Grazing Districts combined.
Rainfall	Driest	Ins. 3·6 in 1898	Ins. 6·3 in 1891	Ins. 5·4 in 1891
	Wettest	9·0 in 1872	15·3 in 1903	12·0 in 1872
Temperature	Coldest	34°1 in 1895	36°2 in 1895	35°2 in 1895
	Warmest	42·8 in 1882	44·6 in 1882	43·7 in 1882

375 Wt 19 5/03 D & S 23 14662

TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR PERIODS OF FOUR WEEKS OR FIVE WEEKS, AND THE PROGRESSIVE VALUES FROM JANUARY 4TH, 1903, FOR THE FIRST QUARTER, 1903.

1903. — FOUR WEEKS OR FIVE WEEKS ENDING	0. SCOTLAND, N.		Principal Wheat-producing Districts.										MEANS FOR WHEAT-PRODUCING DISTRICTS.		Principal Grazing Districts.										MEANS FOR GRAZING DISTRICTS.		CHANNEL ISLANDS.		MEANS FOR DISTRICTS 1-10 COMBINED.	
			1. SCOTLAND, E.		2. ENGLAND, N.E.		3. ENGLAND, E.		4. MIDLAND COUNTIES.		5. ENGLAND, S.				6. SCOTLAND, W.		7. ENGLAND, N.W.		8. ENGLAND, S.W.		9. IRELAND, N.		10. IRELAND, S.							
	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.
RAINFALL.—NUMBERS OF DAYS WITH RAIN.																														
Jan. 31 -	18	18	17	17	16	16	13	13	14	14	17	17	15	15	17	17	17	17	18	18	19	19	21	21	18	18	22	22	17	17
Feb. 28 -	26	44	17	34	11	27	9	22	11	25	14	31	13	28	24	41	18	35	18	36	22	41	19	40	20	38	15	37	16	33
April 4 -	31	75	26	60	20	47	22	44	23	48	23	54	23	51	34	75	28	63	28	64	33	74	30	70	31	69	29	66	27	60
RAINFALL.—AMOUNTS IN INCHES.																														
Jan. 31 -	7·20	7·20	3·95	3·95	1·91	1·91	1·44	1·44	1·91	1·91	2·11	2·11	2·26	2·26	6·47	6·47	3·27	3·27	4·31	4·31	4·38	4·38	5·25	5·25	4·74	4·74	3·12	3·12	3·50	3·
Feb. 28 -	8·76	15·96	4·34	8·29	1·05	2·96	0·59	2·03	1·55	3·46	1·64	3·75	1·83	4·09	7·37	13·84	3·60	6·87	2·39	6·70	3·78	8·16	3·56	8·81	4·14	8·88	2·05	5·17	2·98	6·
April 4 -	8·62	24·58	4·31	12·60	2·13	5·09	2·68	4·71	3·91	7·37	3·02	6·77	3·21	7·30	8·78	22·62	5·00	11·87	5·51	12·21	6·08	14·24	6·88	15·69	6·45	15·33	3·59	8·76	4·83	11·
ACCUMULATED TEMPERATURE.—DAY DEGREES ABOVE 42° F.																														
Jan. 31 -	23	23	25	25	39	39	58	58	54	54	71	71	49	49	34	34	58	58	90	90	40	40	85	85	61	61	136	136	55	5
Feb. 28 -	57	80	88	113	105	144	121	179	117	171	107	178	108	157	88	122	108	166	117	207	107	147	145	230	113	174	148	284	111	16
April 4 -	64	144	86	199	148	292	172	351	148	319	177	355	146	303	105	227	130	296	163	370	110	257	148	378	131	305	204	488	138	30
ACCUMULATED TEMPERATURE.—DAY DEGREES BELOW 42° F.																														
Jan. 31 -	158	158	179	179	132	132	113	113	143	143	93	93	132	132	129	129	120	120	75	75	114	114	67	67	101	101	31	31	117	11
Feb. 28 -	77	235	77	256	50	182	56	169	40	183	21	114	49	181	30	159	27	147	13	88	37	151	20	87	25	126	2	33	37	15
April 4 -	121	356	122	378	73	255	70	239	78	261	32	146	75	256	63	222	47	194	24	112	85	236	46	133	53	179	3	36	64	21
BRIGHT SUNSHINE.—NUMBERS OF HOURS.																														
Jan. 31 -	25	25	26	26	33	33	48	48	39	39	45	45	38	38	18	18	43	43	43	43	40	40	42	42	37	37	52	52	38	
Feb. 28 -	20	45	41	67	57	90	79	127	59	98	65	110	60	98	35	53	55	98	56	99	35	75	44	86	45	82	73	125	53	
April 4 -	91	136	114	181	115	205	143	270	110	208	139	249	124	222	111	164	103	201	117	216	120	195	115	201	113	195	163	288	118	
BRIGHT SUNSHINE.—PERCENTAGES OF POSSIBLE DURATION.																														
Jan. 31 -	12	12	12	12	15	15	21	21	17	17	19	19	17	17	8	8	19	19	18	18	18	18	19	19	17	17	22	22	17	
Feb. 28 -	8	10	16	14	21	18	29	25	22	20	24	22	22	20	13	11	20	20	20	19	13	15	16	17	17	17	26	24	20	
April 4 -	22	16	27	20	28	23	34	29	26	23	33	27	30	24	27	18	25	22	28	23	29	22	28	22	27	21	39	31	28	

EXPLANATION OF TABLES.

TABLES I. and IA. are in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884–1902. The whole of the values for 1878–1903, however, have been corrected by information which may have been received since they were first published.

TABLE II. In this Table the values given do not apply to calendar months but to periods of four weeks or five weeks ending at the dates shown

The figures given in the columns headed "From Jan. 4, 1903" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for "the Grazing Districts" the values for the "Channel Islands" are not included.

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1903.

VOL. XX. APPENDIX I.] *New Series.* SECOND QUARTER—APRIL TO JUNE. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE SECOND QUARTER OF THE THIRTY-EIGHT YEARS, 1866 TO 1903.

YEARS.	Principal Wheat-producing Districts.														Principal Grazing Districts.												Channel Islands.		Means for Districts 1–10 combined.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.					
RAINFALL.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.
Means for 5 years, 1866–1870.	—	8·8	—	5·7	—	5·5	—	4·5	—	5·3	—	5·1	—	5·2	—	7·1	—	6·5	—	7·0	—	7·5	—	7·2	—	7·1	—	—	—	6·2
1871–1875	—	8·5	—	6·5	—	5·5	—	5·5	—	6·4	—	6·4	—	6·1	—	7·3	—	7·4	—	7·9	—	7·5	—	6·2	—	7·3	—	—	—	6·7
1876–1880	—	6·3	—	6·9	—	7·1	—	7·2	—	7·7	—	7·1	—	7·2	—	8·5	—	7·8	—	9·0	—	8·3	—	9·8	—	8·7	—	—	—	8·0
1881–1885	51	6·7	44	5·2	43	5·8	39	5·9	41	6·5	38	5·6	41	5·8	47	8·1	42	7·0	44	7·2	52	7·2	46	7·7	46	7·4	45	5·6	44	6·6
1886–1890	54	7·0	43	5·7	40	4·8	41	5·1	41	6·4	40	5·7	41	5·5	45	8·8	41	6·5	42	6·5	46	7·1	46	7·5	44	7·3	46	5·9	43	6·4
1891	45	6·3	36	4·4	35	4·3	41	5·5	43	6·7	38	4·8	39	5·1	36	5·0	39	5·9	42	7·2	46	6·1	45	8·4	42	6·5	41	6·2	41	5·8
1892	59	9·1	51	6·4	51	7·3	42	6·1	38	5·5	31	3·7	43	5·8	49	10·0	50	8·3	37	4·6	56	9·6	46	8·0	47	8·1	37	4·8	45	7·0
1893	41	5·2	36	5·1	28	3·2	22	2·3	23	3·1	20	1·7	26	3·1	30	5·4	27	4·2	21	3·0	33	4·9	30	4·8	28	4·5	17	2·1	27	3·8
1894	47	6·1	49	6·6	54	7·2	48	7·1	45	5·9	44	5·8	48	6·5	53	8·3	55	7·0	51	7·5	56	8·0	53	9·7	54	8·1	53	6·7	51	7·3
1895	49	8·9	38	4·9	32	4·1	27	2·9	28	4·1	26	2·9	30	3·8	40	4·7	30	4·4	26	4·3	42	4·3	33	4·6	34	4·5	31	3·6	32	4·2
Means for 5 years, 1891–1895.	48	7·1	42	5·5	40	5·2	36	4·8	35	5·1	32	3·8	37	4·9	42	6·7	40	6·0	35	5·3	46	6·6	41	7·1	41	6·3	36	4·7	39	5·6
1896	54	9·0	42	5·0	37	3·2	33	3·8	30	3·8	28	3·0	34	3·8	37	6·3	35	4·4	24	2·8	44	6·1	34	3·8	35	4·7	29	2·8	35	4·3
1897	49	8·7	47	8·0	39	5·4	39	5·3	40	6·7	35	5·4	40	6·2	54	9·9	47	8·0	44	8·0	55	10·6	53	10·0	51	9·3	49	6·3	46	7·7
1898	57	9·9	50	7·0	50	6·2	46	6·7	48	6·6	46	6·2	48	6·5	55	8·7	49	8·8	47	8·9	64	9·4	51	10·3	53	9·2	50	7·6	51	7·9
1899	51	8·9	52	8·4	47	7·1	40	6·0	42	6·4	37	5·3	44	6·6	51	12·1	48	8·5	43	8·1	52	10·0	46	8·7	48	9·5	41	6·3	46	8·1
1900	58	10·0	49	6·0	39	4·9	42	5·0	41	5·5	37	5·1	42	5·3	54	11·9	44	6·6	45	8·5	59	9·4	53	9·7	51	9·2	43	5·0	47	7·3
Means for 5 years, 1896–1900.	54	9·3	48	6·9	42	5·4	40	5·4	40	5·8	37	5·0	41	5·7	50	9·8	45	7·3	41	7·3	55	9·1	47	8·5	48	8·4	42	5·6	45	7·1
1901	50	8·3	45	6·4	34	4·1	36	4·2	35	4·3	31	4·1	36	4·6	45	10·3	40	5·1	35	7·1	49	8·3	41	7·8	42	7·7	38	6·8	39	6·2
1902	59	8·2	54	6·9	47	6·3	49	7·0	48	6·5	50	6·7	50	6·7	55	9·1	52	6·7	49	7·3	63	8·1	55	7·4	55	7·7	49	7·3	53	7·2
1903	50	9·2	46	5·2	40	5·8	33	7·2	38	7·5	35	8·1	38	6·8	41	7·5	42	5·8	37	8·5	50	6·1	43	7·4	43	7·1	43	5·9	41	7·0
Means for 38 years, 1866–1903.	—	7·7	—	6·0	—	5·6	—	5·5	—	6·2	—	5·6	—	5·8	—	8·1	—	6·8	—	7·2	—	7·6	—	7·7	—	7·5	—	—	—	6·7
MEAN TEMPERATURE.	°		°		°		°		°		°		°		°		°		°		°		°		°		°		°	
Means for 5 years, 1866–1870.	48·5		50·4		49·8		52·7		53·1		53·1		51·8		51·3		51·8		53·9		52·5		53·0		52·5		—		52·2	
1871–1875	48·2		49·3		49·6		51·0		52·0		52·1		50·3		51·1		51·3		53·0		51·6		53·3		52·1		—		51·5	
1876–1880	47·2		48·9		49·4		51·1		51·3		51·9		50·5		50·2		50·5		52·0		50·1		52·0		51·0		—		50·8	
1881–1885	46·8		49·5		50·0		51·8		51·8		52·9		51·2		50·0		50·8		51·6		50·6		51·6		50·9		52·7		51·1	
1886–1890	47·6		49·2		49·5		51·4		51·5		52·6		50·8		50·1		50·8		51·9		50·7		52·1		51·1		52·8		51·0	
1891	47·5		48·2		48·8		50·7		50·8		52·3		50·2		50·1		50·5		51·5		50·5		51·7		50·9		53·0		50·6	
1892	46·8		48·2		49·6		51·6		51·6		52·5		50·7		49·6		50·8		51·8		50·6		52·2		51·0		53·6		50·9	
1893	51·0		52·0		52·0		54·2		55·3		56·3		54·0		53·6		54·9		56·5		54·8		56·1		55·2		57·6		54·6	
1894	48·4		48·3		49·3		51·5		51·4		53·2		50·7		50·0		51·2		52·1		50·5		52·2		51·2		53·8		51·0	
1895	49·2		50·3		50·8		52·3		53·0		53·5		52·0		51·6		52·2		53·2		52·0		53·1		52·4		54·0		52·2	
Means for 5 years, 1891–1895.	48·6		49·4		50·1		52·1		52·4		53·6		51·5		51·0		51·9		53·0		51·7		53·1		52·1		54·4		51·8	
1896	49·8		51·7		51·8		52·6		53·4		54·2		52·7		52·5		53·5		54·4		53·1		54·4		53·6		55·4		53·2	
1897	47·4		48·3		49·6		52·1		52·0		53·7		51·1		49·9		51·2		53·1		50·0		52·5		51·3		54·4		51·2	
1898	48·4		49·2		49·9		51·4		51·3		52·6		50·9		50·7		51·3		52·2		51·0		52·4		51·5		53·7		51·2	
1899	47·7		48·6		49·9		51·7		51·8		53·3		51·1		50·2		51·5		52·9		50·9		52·9		51·7		54·7		51·4	
1900	48·6		49·2		50·4		51·9		51·7		52·5		51·1		51·0		51·3		51·9		51·4		52·7		51·7		51·7		51·4	
Means for 5 years, 1896–1900.	48·4		49·4		50·3		51·9		52·0		53·3		51·4		50·9		51·8		52·9		51·3		53·0		52·0		54·0		51·7	
1901	48·9		49·4		50·7		51·8		52·1		52·8		51·4		50·6		51·8		52·9		50·5		52·1		51·6		54·1		51·5	
1902	46·1		46·6		48·1		49·8		49·4		50·4		48·9		48·6		49·3		50·3		48·8		50·4		49·5		52·2		49·2	
1903	47·3		48·4		49·1		51·0		50·6		51·9		50·2		49·9		50·7		51·9		50·3		52·0		51·0		53·2		50·6	
Means for 38 years, 1866–1903.	47·9		49·4		49·8		51·6		51·9		52·7		51·1		50·6		51·2		52·6		51·1		52·5		51·6		—		51·4	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE THIRTY-EIGHT YEARS, 1866 TO 1903.

	Wheat Districts.	Grazing Districts.	Wheat and Grazing Districts combined.
Rainfall { Driest	Ins. 3·1 in 1870 and 1893	Ins. 4·2 in 1887	Ins. 3·8 in 1893
{ Wettest	9·4 in 1879	{ 10·3 in 1872 and 1878 / 10·2 in 1879 and 1882 }	9·8 in 1879
Temperature { Coldest	° 48·4 in 1879	° 49·1 in 1879 and 1885	° 48·8 in 1879
{ Warmest	54·0 in 1868 and 1893	55·2 in 1893	54·8 in 1893

375 Wt 19 8/03 D & S 23 15339

TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR PERIODS OF FOUR WEEKS OR FIVE WEEKS, AND THE PROGRESSIVE VALUES FROM JANUARY 4TH, 1903, FOR THE SECOND QUARTER, 1903.

1903. — Four Weeks or Five Weeks ending	0. Scotland, N.		Principal Wheat-producing Districts. 1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		Principal Grazing Districts. 6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.		Channel Islands.		Means for Districts 1–10 combined.	
	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.
RAINFALL.—NUMBERS OF DAYS WITH RAIN.																														
May 2 -	17	92	17	77	16	63	12	56	13	61	12	66	14	65	13	88	13	76	11	75	17	91	15	85	14	83	13	79	14	74
„ 30 -	15	107	13	90	13	76	13	69	15	76	12	78	13	78	15	103	17	93	15	90	18	109	15	100	16	99	13	92	15	89
July 4 -	18	125	16	106	11	87	8	77	10	86	11	89	11	89	13	116	12	105	11	101	15	124	13	113	13	112	17	109	12	101
RAINFALL.—AMOUNTS IN INCHES.																														
May 2 -	2·92	27·50	1·56	14·16	1·75	6·84	1·30	6·01	2·16	9·53	2·75	9·52	1·90	9·20	1·47	24·09	1·80	13·67	3·07	15·28	1·66	15·90	2·12	17·81	2·02	17·35	1·96	10.72	1·96	13·27
„ 30 -	2·55	30·05	1·43	15·59	1·96	8·80	2·13	8·14	2·91	12·44	2·04	11·56	2·09	11·29	3·02	27·11	2·10	15·77	2·45	17·73	2·52	18·42	1·82	19·63	2·38	19·73	1·54	12·26	2·24	15·51
July 4 -	3·74	33·79	2·17	17·76	2·09	10·89	3·79	11·93	2·47	14·91	3·26	14·82	2·76	14·05	3·04	30·15	1·89	17·66	3·00	20·73	1·90	20·32	3·45	23·08	2·65	22·38	2·26	14·52	2·71	18·22
ACCUMULATED TEMPERATURE.—DAY DEGREES ABOVE 42° F.																														
May 2 -	75	219	85	284	95	387	120	471	123	442	145	500	114	417	105	332	103	399	148	518	111	368	149	527	123	428	170	658	119	423
„ 30 -	178	397	191	475	185	572	270	741	244	686	294	794	237	654	229	561	241	640	290	808	229	597	274	801	253	681	331	989	245	668
July 4 -	347	744	405	880	421	993	471	1212	463	1149	497	1291	451	1105	443	1004	464	1104	482	1250	438	1035	501	1302	466	1147	504	1493	459	1127
ACCUMULATED TEMPERATURE.—DAY DEGREES BELOW 42° F.																														
May 2 -	102	458	102	480	84	339	83	321	90	351	62	208	84	340	92	314	64	258	50	162	50	286	50	183	61	240	13	49	72	290
„ 30 -	25	483	19	499	3	342	1	322	4	355	0	208	5	345	3	317	1	259	0	162	0	286	0	183	1	241	0	49	3	293
July 4 -	8	491	3	502	0	342	0	322	0	355	0	208	1	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
BRIGHT SUNSHINE.—NUMBERS OF HOURS.																														
May 2 -	123	259	122	303	139	344	150	420	143	351	160	409	143	365	145	309	159	360	166	382	106	301	137	338	143	338	189	477	143	352
„ 30 -	130	389	135	438	132	476	167	587	128	479	191	600	151	516	147	456	156	516	183	565	137	438	163	501	157	495	218	695	154	506
July 4 -	164	553	189	627	216	692	231	818	209	688	247	847	218	734	228	684	253	769	234	799	178	616	199	700	218	713	257	952	218	724
BRIGHT SUNSHINE.—PERCENTAGES OF POSSIBLE DURATION.																														
May 2 -	30	20	31	24	35	27	38	32	36	27	41	31	36	28	37	24	40	28	43	29	27	23	35	26	36	26	49	36	36	27
„ 30 -	28	22	30	25	30	27	38	34	29	27	44	34	34	30	33	26	35	30	42	32	31	25	37	29	36	28	51	40	35	29
July 4 -	27	24	31	27	37	30	40	35	36	30	43	37	37	32	38	29	43	33	41	35	30	26	34	30	37	31	46	41	37	31

EXPLANATION OF TABLES.

TABLES I. and IA. are in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884–1902. The whole of the values for 1878–1903, however, have been corrected by information which may have been received since they were first published.

TABLE II. In this Table the values given do not apply to calendar months but to periods of four weeks or five weeks ending at the dates shown.

The figures given in the columns headed "From Jan. 4, 1903" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for "the Grazing Districts" the values for the "Channel Islands" are not included.

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1903.

VOL. XX. APPENDIX I.] *New Series.* THIRD QUARTER—JULY TO SEPTEMBER. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE THIRD QUARTER OF THE THIRTY-EIGHT YEARS, 1866 TO 1903.

YEARS.	0. SCOTLAND, N.	Principal Wheat-producing Districts. 1. SCOTLAND, E.	2. ENGLAND, N.E.	3. ENGLAND, E.	4. MIDLAND COUNTIES.	5. ENGLAND S.	MEANS FOR WHEAT-PRODUCING DISTRICTS.	Principal Grazing Districts. 6. SCOTLAND, W.	7. ENGLAND, N.W.	8. ENGLAND, S.W.	9. IRELAND, N.	10. IRELAND, S.	MEANS FOR GRAZING DISTRICTS.	CHANNEL ISLANDS.	MEANS FOR DISTRICTS 1-10 COMBINED.
RAINFALL.															
	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.	Days. Ins.
Means for 5 years, 1866-1870.	— 10·6	— 8·8	— 6·3	— 6·1	— 7·4	— 7·3	— 7·2	— 10·9	— 9·9	— 10·1	— 9·8	— 8·6	— 9·8	— —	— 8·6
1871-1875	— 13·1	— 10·7	— 8·4	— 7·5	— 9·1	— 8·0	— 8·7	— 13·2	— 12·9	— 14·1	— 12·2	— 10·8	— 12·6	— —	— 10·7
1876-1880	— 9·0	— 8·9	— 9·2	— 9·0	— 10·1	— 8·7	— 9·2	— 11·7	— 12·3	— 11·6	— 11·1	— 10·7	— 11·5	— —	— 10·4
1881-1885	56 7·8	51 7·9	46 7·3	45 7·4	45 7·5	44 6·6	46 7·3	53 11·8	49 9·8	52 10·0	60 10·3	53 10·2	53 10·4	54 7·6	50 8·9
1886-1890	60 10·3	51 7·4	46 7·6	45 7·3	43 6·8	40 6·9	45 7·2	51 10·9	47 9·3	46 9·1	58 10·3	50 9·1	50 9·7	46 7·1	48 8·5
1891	71 15·9	59 11·7	51 8·8	51 8·5	52 7·9	52 9·0	53 9·2	62 14·9	55 13·8	56 12·9	66 11·3	56 11·0	59 12·8	51 9·7	56 11·0
1892	66 15·0	51 8·3	44 6·6	40 8·2	46 7·5	44 8·4	45 7·8	53 15·5	53 12·1	51 10·0	62 12·0	53 13·2	54 12·5	43 7·2	50 10·2
1893	70 15·7	55 8·1	49 6·8	45 5·9	43 6·0	43 7·0	47 6·8	53 11·3	54 10·4	47 9·9	60 11·2	52 8·7	53 10·3	51 9·8	50 8·6
1894	53 10·5	48 8·9	49 6·2	54 7·6	44 6·8	51 9·2	49 7·7	40 7·3	44 8·0	52 10·7	54 6·8	45 8·8	47 8·3	54 11·9	48 8·0
1895	63 14·0	51 9·6	44 7·9	34 8·3	40 6·6	37 6·8	41 7·8	54 12·7	46 9·3	40 8·3	57 10·9	49 10·1	49 10·3	39 5·7	45 9·1
Means for 5 years, 1891-1895.	65 14·2	53 9·3	47 7·3	45 7·7	45 7·0	45 8·1	47 7·9	52 12·3	50 10·7	49 10·4	60 10·4	51 10·4	52 10·8	48 8·9	50 9·4
1896	59 13·5	59 9·3	52 6·9	49 8·2	51 8·3	46 9·1	51 8·4	60 13·9	55 11·3	49 10·0	64 13·5	56 12·7	57 12·3	50 9·6	54 10·4
1897	58 12·2	53 7·7	42 7·4	41 6·9	42 7·4	41 6·6	44 7·2	55 11·9	47 10·0	53 11·7	59 10·5	56 11·0	54 11·0	53 9·1	49 9·1
1898	57 13·1	43 6·5	30 3·8	21 2·9	25 4·2	19 2·8	28 4·0	49 11·1	40 7·2	29 5·4	51 8·9	42 9·0	42 8·3	34 3·7	35 6·2
1899	55 12·2	47 7·6	38 5·6	34 5·2	33 5·1	28 5·4	36 5·8	54 10·1	47 8·9	38 6·7	56 8·3	44 8·3	48 8·5	33 4·8	42 7·2
1900	60 12·9	50 9·6	35 7·3	32 5·5	31 6·1	29 4·1	35 6·5	57 14·7	42 9·5	43 6·6	52 8·8	41 9·7	47 9·9	40 4·3	41 8·2
Means for 5 years, 1896-1900.	58 12·8	50 8·1	39 6·2	35 5·7	36 6·2	33 5·6	39 6·4	55 12·3	46 9·4	42 8·1	56 10·0	48 10·1	49 10·0	42 6·3	44 8·2
1901	52 9·9	46 6·9	33 5·4	26 4·2	30 7·6	29 7·2	33 6·3	51 11·8	41 6·4	40 8·6	56 9·4	47 9·6	47 9·2	38 6·6	40 7·8
1902	65 10·1	53 6·9	46 5·4	40 6·8	45 6·4	43 6·8	45 6·5	52 12·6	52 6·4	46 7·4	62 9·6	46 7·8	52 8·8	47 5·8	49 7·7
1903	67 15·3	63 11·3	55 10·1	49 10·6	51 10·2	52 9·9	54 10·4	59 17·2	58 13·3	55 12·4	70 14·2	63 13·3	61 14·1	58 10·8	58 12·3
Means for 38 years, 1866-1903.	— 11·2	— 8·7	— 7·4	— 7·3	— 7·8	— 7·4	— 7·7	— 12·1	— 10·5	— 10·4	— 10·6	— 10·0	— 10·7	— —	— 9·2
MEAN TEMPERATURE.															
Means for 5 years, 1866-1870.	54·4	57·1	57·0	58·7	59·7	60·1	58·7	57·9	59·0	61·0	58·5	59·5	59·2	—	59·0
1871-1875	54·5	56·7	57·5	59·7	59·6	60·0	58·7	57·7	58·5	60·4	57·2	58·8	58·5	—	58·6
1876-1880	54·1	56·4	57·6	59·6	59·3	60·3	58·6	57·2	58·1	59·9	56·8	59·0	58·2	—	58·4
1881-1885	53·1	56·3	57·3	59·0	58·2	59·9	58·1	55·9	57·2	58·1	56·2	57·2	56·9	59·8	57·6
1886-1890	52·8	55·1	56·7	58·7	57·9	59·6	57·6	55·4	57·0	58·2	56·1	57·6	56·9	60·1	57·3
1891	54·0	55·7	57·0	58·4	57·5	59·2	57·6	56·1	57·4	57·4	56·6	57·3	57·0	59·8	57·3
1892	52·1	53·5	55·4	57·6	56·5	59·2	56·4	54·4	56·2	57·6	55·1	57·0	56·1	60·6	56·3
1893	55·0	56·3	58·4	60·5	60·2	61·7	59·4	57·3	59·9	60·4	58·1	59·5	59·0	62·7	59·2
1894	54·5	55·1	56·5	58·0	57·2	59·3	57·2	55·5	57·2	57·6	55·9	56·7	56·6	60·1	56·9
1895	55·4	56·9	59·4	60·8	60·0	61·7	59·8	57·2	59·3	59·8	57·5	58·3	58·4	62·4	59·1
Means for 5 years, 1891-1895.	54·2	55·5	57·3	59·1	58·3	60·2	58·1	56·1	58·0	58·6	56·6	57·8	57·4	61·1	57·8
1896	53·8	55·1	57·6	59·4	58·3	60·9	58·3	56·1	58·1	59·4	56·1	58·1	57·6	61·8	58·0
1897	54·9	55·9	57·4	59·3	58·6	60·9	58·4	56·6	58·3	59·2	56·8	58·1	57·8	61·3	58·1
1898	54·9	56·9	58·7	60·6	60·1	62·3	59·7	57·4	59·2	60·7	58·1	60·3	59·1	63·2	59·4
1899	56·0	57·0	59·1	61·6	61·2	63·4	60·5	57·7	59·9	62·3	58·5	60·3	59·7	64·4	60·1
1900	55·0	55·9	58·7	61·4	60·0	61·7	59·5	56·8	58·8	60·1	57·5	59·0	58·4	62·6	59·0
Means for 5 years, 1896-1900.	54·9	56·2	58·3	60·5	59·6	61·8	59·3	56·9	58·9	60·3	57·4	59·2	58·5	62·7	58·9
1901	56·7	57·9	59·9	61·4	60·8	61·9	60·4	58·2	60·0	60·8	57·6	59·5	59·2	62·5	59·8
1902	52·6	53·8	56·1	58·5	57·3	59·6	57·1	55·0	56·7	58·6	55·9	58·2	56·9	61·0	57·0
1903	52·9	53·8	56·3	58·8	57·2	59·4	57·1	53·3	56·8	58·3	55·6	57·4	56·7	60·4	56·9
Means for 38 years, 1866-1903.	54·0	56·1	57·4	59·4	58·9	60·3	58·4	56·7	58·1	59·5	56·9	58·4	57·9	—	58·2

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE THIRTY-EIGHT YEARS, 1866 TO 1903.

		Wheat Districts.	Grazing Districts.	Wheat and Grazing Districts combined.
Rainfall	Driest	Ins. 4·0 in 1898	Ins. 6·4 in 1870	Ins. 5·7 in 1870
	Wettest	10·6 in 1879	14·2 in 1872	12·4 in 1879
Temperature	Coldest	°55·7 in 1888	°55·5 in 1888	°55·6 in 1888
	Warmest	60·9 in 1868	60·8 in 1868	60·9 in 1868

375 Wt 19 11/03 D & S 23 15917

TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR PERIODS OF FOUR WEEKS OR FIVE WEEKS, AND THE PROGRESSIVE VALUES FROM JANUARY 4TH, 1903, FOR THE THIRD QUARTER, 1903.

1903. — Four Weeks or Five Weeks ending	0. Scotland, N.		Principal Wheat-producing Districts. 1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		Principal Grazing Districts. 6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.		Channel Islands.		Means for Districts 1-10 combined.	
	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.
RAINFALL.—NUMBERS OF DAYS WITH RAIN.																														
Aug. 1 -	18	143	17	123	16	103	16	93	15	101	15	104	16	105	16	132	15	120	16	117	21	145	18	131	17	129	14	123	17	118
„ 29 -	24	167	23	146	17	120	14	107	16	117	17	121	17	122	21	153	20	140	18	135	26	171	23	154	22	151	21	144	20	138
Oct. 3 -	25	192	23	169	22	142	19	126	20	137	20	141	21	143	22	175	23	163	21	156	23	194	22	176	22	173	23	167	21	159
RAINFALL.—AMOUNTS IN INCHES.																														
Aug. 1 -	3·37	37·16	4·27	22·03	4·05	14·94	4·01	15·94	2·61	17·52	3·52	18·34	3·69	17·74	3·94	34·09	3·47	21·13	3·33	24·06	3·58	23·90	4·06	27·14	3·68	26·06	2·94	17·46	3·68	21·90
„ 29 -	6·38	43·54	2·97	25·00	2·54	17·48	3·70	19·64	4·13	21·65	3·52	21·86	3·37	21·11	5·88	39·97	4·04	25·17	4·18	28·28	5·24	29·09	4·57	31·71	4·78	30·84	4·43	21·89	4·08	25·98
Oct. 3 -	5·59	49·13	4·05	29·05	3·49	20·97	2·85	22·49	3·46	25·11	2·85	24·71	3·34	24·45	7·41	47·38	5·79	30·96	4·89	33·17	5·35	34·44	4·64	36·35	5·62	36·46	3·44	25·33	4·48	30·46
ACCUMULATED TEMPERATURE.—DAY DEGREES ABOVE 42° F.																														
Aug. 1	297	1041	350	1230	428	1421	492	1704	468	1617	513	1804	450	1555	394	1398	439	1543	483	1773	405	1440	469	1771	438	1585	545	2038	441	1571
„ 29 -	302	1343	334	1564	410	1831	465	2169	416	2033	481	2285	421	1976	373	1771	420	1963	444	2217	373	1813	413	2184	405	1990	518	2556	413	1984
Oct. 3 -	353	1696	383	1927	430	2261	525	2694	466	2499	548	2833	466	2442	416	2187	455	2418	522	2739	434	2247	487	2671	462	2452	590	3146	464	2448
ACCUMULATED TEMPERATURE.—DAY DEGREES BELOW 42° F.																														
Aug. 1 -	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
„ 29 -	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
Oct. 3 -	0	491	7	509	0	342	0	322	6	361	0	208	3	349	7	324	3	262	0	162	0	286	0	183	2	243	0	49	3	296
BRIGHT SUNSHINE.—NUMBERS OF HOURS.																														
Aug. 1 -	129	682	108	735	119	811	130	948	132	820	165	1012	131	865	145	829	142	911	186	985	114	730	126	826	142	855	222	1174	137	861
„ 29 -	109	791	166	901	159	970	166	1114	145	965	175	1187	162	1027	171	1000	164	1075	174	1159	135	865	149	975	159	1014	198	1372	161	1022
Oct. 3 -	144	935	144	1045	159	1129	180	1294	156	1121	180	1367	164	1191	163	1163	162	1237	169	1328	160	1025	160	1135	163	1177	184	1556	163	1185
BRIGHT SUNSHINE.—PERCENTAGES OF POSSIBLE DURATION.																														
Aug. 1 -	27	24	23	26	26	29	29	34	29	30	38	37	29	31	32	30	31	33	42	36	25	26	28	30	32	31	51	43	30	31
„ 29 -	26	24	40	28	39	30	41	35	36	30	44	38	40	32	41	31	40	34	43	37	33	27	37	31	39	32	50	44	39	32
Oct. 3 -	33	25	33	29	36	31	41	36	36	31	41	38	38	33	37	32	37	34	39	37	37	28	37	31	37	32	42	44	37	33

EXPLANATION OF TABLES.

TABLES I. and IA. are in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884-1902. The whole of the values for 1878-1903, however, have been corrected by information which may have been received since they were first published.

TABLE II. In this Table the values given do not apply to calendar months but to periods of four weeks or five weeks ending at the dates shown.

The figures given in the columns headed "From Jan. 4, 1903" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for the Grazing Districts" the values for the "Channel Islands" are not included.

(OFFICIAL COPY.)

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1903.

VOL. XX. APPENDIX I.] FOURTH QUARTER—OCTOBER TO DECEMBER. [*Price 4d.*
New Series.

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE FOURTH QUARTER OF THE THIRTY-EIGHT YEARS, 1866 TO 1903.

YEARS.	Principal Wheat-producing Districts.														Principal Grazing Districts.												Channel Islands.		Means for Districts 1-10 combined.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.					
	RAINFALL.																													
	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.
Means for 5 years, 1866-1870.	—	18·4	—	8·8	—	7·7	—	7·4	—	7·6	—	8·3	—	8·0	—	12·9	—	14·7	—	14·6	—	12·6	—	10·5	—	13·1	—	—	—	10·6
1871-1875	—	17·2	—	10·4	—	7·7	—	7·2	—	7·9	—	9·9	—	8·6	—	13·1	—	13·3	—	16·3	—	11·1	—	12·1	—	13·2	—	—	—	10·9
1876-1880	—	13·8	—	9·1	—	8·1	—	7·2	—	8·1	—	9·5	—	8·4	—	12·8	—	12·0	—	14·1	—	11·0	—	11·3	—	12·2	—	—	—	10·3
1881-1885	68	12·7	54	7·2	55	7·3	59	8·8	55	8·6	52	8·9	55	8·2	58	15·8	56	11·0	62	13·7	64	11·8	61	11·8	60	12·8	67	12·4	58	10·5
1886-1890	71	15·0	57	8·5	53	7·3	51	6·6	50	7·2	52	8·8	53	7·7	58	15·3	59	10·7	62	13·6	64	12·1	59	12·6	60	12·9	69	11·9	57	10·3
1891	61	15·9	51	9·7	52	7·8	62	9·0	60	11·4	62	13·6	57	10·3	60	20·8	58	14·2	64	18·2	64	12·4	61	16·5	61	16·4	66	14·6	59	13·4
1892	65	14·5	53	8·0	55	7·3	49	8·9	48	6·1	47	8·6	50	7·8	57	13·0	56	10·5	57	10·1	68	10·5	59	11·3	59	11·1	63	10·3	55	9·5
1893	76	24·2	57	8·2	52	5·9	55	7·7	50	6·7	51	8·9	53	7·5	65	16·4	61	10·4	56	12·1	65	10·1	57	10·4	61	11·9	61	9·2	57	9·7
1894	66	15·8	48	7·4	54	7·0	56	7·7	53	8·9	52	10·8	53	8·4	62	15·3	58	11·4	55	16·2	60	10·9	53	14·1	58	13·6	58	12·3	56	11·0
1895	66	16·6	58	10·6	55	8·2	52	7·4	53	8·6	56	10·5	55	9·1	53	14·2	59	11·9	65	16·6	63	12·7	62	13·8	60	13·8	74	15·3	58	11·5
Means for 5 years, 1891-1895.	67	17·4	53	8·8	54	7·2	55	8·1	53	8·3	54	10·5	54	8·6	59	15·9	58	11·7	59	14·6	64	11·3	58	13·2	60	13·3	64	12·3	57	11·0
1896	71	15·9	62	10·4	68	11·1	61	8·0	58	8·2	57	9·3	61	9·4	58	13·1	57	11·2	63	14·0	62	10·4	58	11·5	60	12·0	76	12·9	61	10·7
1897	59	14·7	47	7·7	43	5·2	37	3·9	42	6·0	37	5·5	41	5·7	55	14·4	44	11·2	44	11·0	54	10·4	49	15·0	49	12·4	46	8·9	45	9·1
1898	71	24·4	59	11·4	52	8·5	48	7·2	50	8·3	48	9·2	51	8·9	62	16·1	63	10·5	64	15·3	69	11·7	64	13·5	64	13·4	68	12·7	58	11·2
1899	67	18·5	48	8·6	40	6·3	38	6·6	35	6·9	34	8·4	39	7·4	59	16·6	41	9·3	45	11·4	58	11·2	50	13·2	51	12·3	46	9·9	45	9·9
1900	76	22·3	71	12·8	60	9·2	60	5·9	61	8·3	59	8·8	62	9·0	72	23·6	64	13·4	69	15·9	71	15·2	67	18·8	69	17·4	71	12·2	66	13·2
Means for 5 years, 1896-1900.	69	19·2	57	10·2	53	8·1	49	6·3	49	7·5	47	8·2	51	8·1	61	16·8	54	11·1	57	13·5	63	11·8	58	14·4	59	13·5	61	11·3	55	10·8
1901	71	15·5	55	8·7	46	9·5	44	7·4	41	6·9	41	6·8	45	7·9	64	17·5	53	11·8	49	9·9	66	12·6	55	10·9	57	12·5	58	10·3	51	10·2
1902	62	15·9	59	8·7	51	8·5	48	4·7	50	7·4	51	7·5	52	7·0	62	18·0	56	9·7	56	12·0	62	10·7	62	12·9	60	12·7	68	10·2	56	9·9
1903	65	16·6	63	10·0	55	10·0	52	7·6	57	9·3	56	11·0	57	9·6	66	19·1	63	13·4	65	15·5	71	12·7	66	12·3	66	14·6	74	13·2	61	12·1
Means for 38 years, 1866-1903.	—	16·2	—	9·0	—	7·7	—	7·3	—	7·9	—	9·1	—	8·2	—	14·9	—	12·0	—	14·2	—	11·7	—	12·3	—	13·0	—	—	—	10·6
	MEAN TEMPERATURE.																													
Means for 5 years, 1866-1870.	42°1		42°1		42°5		43°6		43°4		44°2		43°2		43°2		43°8		47°0		44°0		45°2		44°6		°		43°9	
1871-1875	42·4		41·8		42·7		42·9		42·8		43·6		42·8		42·7		43·6		46·3		43·3		45·4		44·3		—		43·6	
1876-1880	41·7		41·6		42·3		42·9		42·4		44·2		42·7		42·9		43·7		47·1		43·6		45·6		44·6		—		43·7	
1881-1885	42·6		42·0		43·4		43·4		43·0		45·1		43·4		43·5		44·1		46·5		43·9		45·6		44·7		49·1		44·1	
1886-1890	42·1		41·8		42·6		42·3		42·1		44·1		42·6		43·6		43·6		45·2		44·2		45·5		44·0		48·7		43·5	
1891	42·0		40·8		42·3		43·6		42·5		45·6		43·0		43·4		43·7		45·9		43·3		44·8		44·2		49·4		43·6	
1892	40·2		39·1		40·9		41·5		40·5		43·5		41·1		41·5		42·1		44·5		42·9		44·6		43·1		48·2		42·1	
1893	41·9		42·0		44·0		43·9		43·4		45·3		43·7		44·1		45·3		46·0		44·0		45·5		45·0		49·4		44·4	
1894	44·0		42·7		44·7		45·5		45·2		47·4		45·1		45·6		46·7		48·0		45·6		47·3		46·6		51·2		45·9	
1895	41·2		40·5		43·0		43·8		42·9		46·0		43·2		43·0		44·2		46·6		43·0		45·3		44·4		51·0		43·8	
Means for 5 years, 1891-1895.	41·9		41·0		43·0		43·7		42·9		45·6		43·2		43·5		44·4		46·2		43·8		45·5		44·7		49·8		44·0	
1896	41·2		40·5		41·9		41·8		40·9		43·5		41·7		42·1		42·5		43·3		42·2		43·3		42·7		47·5		42·2	
1897	43·2		42·9		45·0		44·4		44·2		47·4		44·8		45·8		46·6		48·1		46·2		48·4		47·0		51·5		45·9	
1898	44·3		44·2		47·0		47·4		46·7		49·3		46·9		46·8		48·1		49·5		47·1		48·8		48·1		52·7		47·5	
1899	44·0		42·8		43·9		44·0		42·9		46·2		44·0		44·7		44·8		47·0		46·1		47·6		46·0		51·1		45·0	
1900	43·4		43·2		46·1		46·7		46·0		48·3		46·1		45·3		46·9		48·2		45·5		47·4		46·7		52·2		46·4	
Means for 5 years, 1896-1900.	43·2		42·7		44·8		44·9		44·1		46·9		44·7		44·9		45·8		47·2		45·4		47·1		46·1		51·0		45·4	
1901	41·8		41·1		43·0		43·5		42·3		45·0		43·0		43·2		44·1		45·2		44·4		45·5		44·5		49·6		43·8	
1902	43·9		42·9		44·9		44·7		44·1		45·8		44·5		45·2		45·3		46·6		45·9		47·5		46·1		49·9		45·3	
1903	41·2		40·7		43·0		44·1		42·9		45·4		43·2		43·1		43·9		46·1		43·9		45·1		44·4		49·5		43·8	
Means for 38 years, 1866-1903.	42·3		41·8		43·1		43·4		43·0		44·9		43·2		43·5		44·2		46·5		44·1		45·7		44·8		—		44·0	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE THIRTY-EIGHT YEARS, 1866 TO 1903.

		Wheat Districts.	Grazing Districts.	Wheat and Grazing Districts combined.
		Ins.	Ins.	Ins.
Rainfall	Driest	3·4 in 1879	5·0 in 1879	4·2 in 1879
	Wettest	13·1 in 1872	18·6 in 1872	15·9 in 1872
		°	°	°
Temperature	Coldest	40·3 in 1887	41·9 in 1887	41·1 in 1887
	Warmest	46·9 in 1898	48·1 in 1898	47·5 in 1898

375 Wt 4/04 D & S 23 17574

TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR PERIODS OF FOUR WEEKS OR FIVE WEEKS, AND THE PROGRESSIVE VALUES FROM JANUARY 4TH, 1903, FOR THE FOURTH QUARTER, 1903.

1903. — FOUR WEEKS OR FIVE WEEKS ENDING	Principal Wheat-producing Districts.														Principal Grazing Districts.														Channel Islands.		Means for Districts 1-10 combined	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.							
	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.	For the Period.	From Jan. 4, 1903.
RAINFALL.—NUMBERS OF DAYS WITH RAIN.																														
Oct. 31 -	26	218	25	194	23	165	21	147	25	162	24	165	24	167	26	201	26	189	27	183	26	220	24	200	26	199	28	195	25	184
Nov. 28 -	21	239	18	212	14	179	15	162	14	176	14	179	15	182	21	222	19	208	17	200	20	240	18	218	19	218	19	214	17	201
Jan. 2/04 -	18	257	20	232	18	197	16	178	18	194	18	197	18	200	19	241	18	226	21	221	25	265	24	242	21	239	27	241	19	220
RAINFALL.—AMOUNTS IN INCHES.																														
Oct. 31 -	7·39	56·52	5·46	34·51	6·20	27·17	4·23	26·72	6·09	31·20	6·40	31·11	5·68	30·13	9·30	56·68	7·09	38·05	7·96	41·13	6·04	40·48	5·13	41·48	7·10	43·56	6·13	31·46	6·39	36·85
Nov. 28 -	5·85	62·37	2·09	36·60	1·53	28·70	1·91	28·63	1·74	32·94	1·75	32·86	1·80	31·93	4·88	61·56	3·42	41·47	2·72	43·85	2·80	43·28	2·44	43·92	3·25	46·81	2·49	33·95	2·53	39·38
Jan. 2/04 -	3·31	65·68	2·45	39·05	2·25	30·95	1·50	30·13	1·49	34·43	2·85	35·71	2·11	34·04	4·90	66·46	2·88	44·35	4·82	48·67	3·90	47·18	4·69	48·61	4·24	51·05	4·57	38·52	3·18	42·56
ACCUMULATED TEMPERATURE.—DAY DEGREES ABOVE 42° F.																														
Oct. 31 -	122	1818	134	2061	189	2450	259	2953	212	2711	304	3137	220	2662	180	2367	223	2641	284	3023	186	2433	224	2895	219	2672	364	3510	220	2668
Nov. 28 -	73	1891	79	2140	106	2556	121	3074	104	2815	132	3269	108	2770	99	2466	114	2755	162	3185	122	2555	157	3052	131	2803	239	3749	120	2788
Jan. 2/04 -	5	1896	3	2143	13	2569	12	3086	11	2826	43	3312	16	2786	16	2482	22	2777	63	3248	24	2579	61	3113	37	2840	114	3863	26	2814
ACCUMULATED TEMPERATURE.—DAY DEGREES BELOW 42° F.																														
Oct. 31 -	14	505	14	523	0	342	0	322	0	361	0	208	3	352	0	324	0	262	0	162	7	293	6	189	3	246	0	49	3	299
Nov. 28 -	64	569	83	606	56	398	49	371	56	417	31	239	55	407	40	364	36	298	14	176	22	315	27	216	28	274	0	49	42	341
Jan. 2/04 -	197	766	233	839	171	569	165	536	199	616	140	379	182	589	165	529	166	464	104	280	142	457	109	325	137	411	32	81	159	500
BRIGHT SUNSHINE.—NUMBERS OF HOURS.																														
Oct. 31 -	46	981	56	1101	62	1191	74	1368	65	1186	76	1443	67	1258	53	1216	58	1295	75	1403	75	1100	87	1222	70	1247	86	1642	69	1254
Nov. 28 -	28	1009	53	1154	67	1258	51	1419	56	1242	59	1502	57	1315	51	1267	62	1357	72	1475	51	1151	66	1288	60	1307	71	1713	58	1312
Jan. 2/04 -	29	1038	11	1165	17	1275	26	1445	22	1264	29	1531	21	1336	30	1297	33	1390	42	1517	35	1186	48	1336	38	1345	41	1754	29	1341
BRIGHT SUNSHINE.—PERCENTAGES OF POSSIBLE DURATION.																														
Oct. 31 -	16	25	20	28	22	30	26	35	22	30	26	37	23	32	19	31	20	33	26	36	26	28	30	31	24	32	29	42	24	32
Nov. 28 -	13	24	24	28	29	30	21	34	23	30	24	36	24	32	22	30	26	33	29	36	22	28	28	31	25	32	28	42	25	32
Jan. 2/04 -	13	24	5	26	7	29	10	33	8	29	11	35	8	30	12	29	13	32	15	34	14	27	18	30	15	31	15	40	12	30

EXPLANATION OF TABLES.

TABLES I. and IA. are in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884–1902. The whole of the values for 1878–1903, however, have been corrected by information which may have been received since they were first published.

TABLE II. In this Table the values given do not apply to calendar months but to periods of four weeks or five weeks ending at the dates shown.

The figures given in the columns headed "From Jan. 4, 1903" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for the Grazing Districts" the values for the "Channel Islands" are not included.

SUMMARY OF THE WEEKLY WEATHER REPORT, 1903.

VOL. XX. APPENDIX I.] *New Series.* VALUES FOR THE WHOLE YEAR. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE FOR THE WHOLE YEAR DURING THE THIRTY-EIGHT YEARS, 1866 TO 1903.

YEARS.	Principal Wheat-producing Districts.												Principal Grazing Districts.												Channel Islands.		Means for Districts 1-10 combined.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.					
	RAINFALL.																											
	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.	Days.	Ins.
Means for 5 years, 1866-1870.	—	50·4	—	32·9	—	25·0	—	23·8	—	27·3	—	29·2	—	27·6	—	43·5	—	42·9	—	45·4	—	41·7	—	37·4	—	42·2	—	—	—	34·9
1871-1875	—	47·8	—	35·4	—	26·5	—	24·6	—	30·1	—	31·4	—	29·6	—	44·7	—	44·0	—	52·0	—	40·3	—	39·6	—	44·1	—	—	—	36·9
1876-1880	—	38·6	—	32·0	—	29·8	—	29·0	—	32·2	—	32·5	—	31·1	—	44·2	—	41·4	—	44·6	—	39·6	—	41·9	—	42·3	—	—	—	36·7
1881-1885	241	37·1	198	26·4	188	25·5	187	27·2	186	29·0	177	27·4	187	27·1	216	48·1	198	36·6	211	40·7	236	38·6	217	41·7	216	41·1	222	33·8	202	34·1
1886-1890	251	44·3	203	27·7	187	24·9	184	23·7	176	25·6	177	26·8	185	25·7	207	45·7	197	33·3	200	37·4	223	37·9	204	38·7	206	38·6	217	32·0	196	32·2
1891	242	52·8	184	30·9	181	24·6	197	26·8	192	30·1	190	33·2	188	29·1	205	49·9	186	38·3	200	45·1	225	35·3	204	41·5	203	42·0	201	36·7	197	35·6
1892	253	49·8	201	28·2	197	25·6	180	27·2	176	23·1	160	24·4	183	25·7	206	46·5	205	37·2	192	31·1	232	38·0	203	40·1	208	38·6	195	29·2	196	32·2
1893	252	57·9	199	27·3	173	20·4	171	21·1	164	20·8	162	23·5	174	22·6	205	43·1	191	31·4	173	33·7	217	34·0	189	32·6	195	35·0	185	28·4	185	28·8
1894	234	53·5	201	33·9	208	25·8	205	26·6	196	27·4	196	32·1	201	29·2	219	49·5	213	36·3	214	44·9	234	38·0	212	43·5	218	42·4	221	38·6	210	35·8
1895	237	49·3	195	31·5	189	27·7	165	24·2	163	24·7	160	24·9	174	26·6	196	38·3	183	32·3	177	37·3	218	35·6	192	38·0	193	36·3	199	31·9	184	31·5
Means for 5 years, 1891-1895.	244	52·7	196	30·4	190	24·8	184	25·2	178	25·2	174	27·6	184	26·6	206	45·5	196	35·1	191	38·4	225	36·2	200	39·1	204	38·9	200	33·0	194	32·8
1896	252	56·2	213	29·5	196	25·3	190	24·9	184	24·6	173	25·8	191	26·0	216	45·4	200	35·2	186	33·7	226	39·2	199	36·8	205	38·1	208	30·2	198	32·1
1897	231	46·6	204	30·3	183	24·4	174	23·0	178	28·0	168	26·7	180	26·5	222	47·5	199	37·1	206	43·7	234	41·1	219	47·8	215	43·4	218	35·9	201	35·0
1898	262	66·1	204	29·7	176	21·9	156	20·3	162	22·0	150	21·7	170	23·1	228	46·4	202	33·8	188	35·6	245	37·8	202	39·4	213	38·6	208	28·4	192	30·9
1899	233	53·3	200	33·0	173	24·3	158	22·4	154	25·2	137	25·0	164	26·0	221	51·9	187	35·6	175	38·7	228	38·4	191	42·7	200	41·5	169	29·1	182	33·8
1900	260	56·9	224	37·2	188	29·2	189	23·9	183	28·5	175	27·3	192	29·2	237	62·4	202	38·7	213	44·5	242	41·6	217	48·1	222	47·1	219	33·9	207	38·2
Means for 5 years, 1896-1900.	248	55·8	209	31·9	183	25·0	173	22·9	172	25·7	161	25·3	180	26·2	225	50·7	198	36·1	194	39·2	235	39·6	206	43·0	212	41·7	204	31·5	196	34·0
1901	237	44·3	198	28·5	168	24·6	158	20·9	155	25·4	146	24·2	165	24·7	210	49·6	185	30·0	171	34·9	230	38·4	191	36·9	197	38·0	197	31·7	181	31·4
1902	254	48·8	216	27·2	185	21·9	179	21·7	181	24·9	179	25·9	188	24·3	229	53·0	213	29·3	198	34·3	250	37·1	212	37·2	220	38·2	215	29·2	204	31·2
1903	257	65·7	232	39·1	197	31·0	178	30·1	194	34·4	197	35·8	200	34·1	241	66·4	226	44·4	221	48·6	265	47·2	242	48·7	239	51·1	241	38·7	220	42·6
Means for 38 years, 1866-1903.	—	47·2	—	31·0	—	25·9	—	25·1	—	27·9	—	28·6	—	27·7	—	46·9	—	38·2	—	42·3	—	39·3	—	40·2	—	41·4	—	—	—	34·6
	MEAN TEMPERATURE.																													
Means for 5 years, 1866-1870.	45°9		47°2		47°1		49°0		49°1		49°5		48°4		48°1		48°8		51°3		48°9		50°0		49°4		° —		48°9	
1871-1875	46°3		47°1		47°4		48°4		48°8		49°3		48°2		48°1		48°6		50°9		48°4		50°3		49°3		—		48°8	
1876-1880	45°4		46°3		47°1		48°3		48°2		49°3		47°8		47°6		48°1		50°6		47°9		50°1		48°9		—		48°4	
1881-1885	45°3		46°6		47°5		48°5		48°2		49°8		48°1		47°4		48°2		49°7		48°0		49°4		48°5		51°6		48°3	
1886-1890	45°2		46°1		46°8		47°4		47°3		48°8		47°3		47°1		47°6		48°9		47°9		49°3		48°2		51°2		47°8	
1891	45°5		45°7		46°5		47°5		47°2		48°9		47°2		47°3		47°8		48°8		47°8		49°0		48°1		51°3		47°7	
1892	43°9		44°2		45°7		46°8		46°3		48°4		46°3		45°9		46°8		48°4		47°0		48°5		47°3		51°4		46°8	
1893	46°7		47°3		48°7		49°6		49°8		51°2		49°3		48°9		50°3		51°4		49°8		51°2		50°3		53°9		49°8	
1894	46°5		46°2		47°6		48°8		48°6		50°4		48°3		48°0		49°3		50°1		48°5		50°0		49°2		52°7		48°8	
1895	45°0		45°1		47°0		47°8		47°4		49°1		47°3		46°7		47°7		49°0		47°3		48°8		47°9		51°8		47°6	
Means for 5 years, 1891-1895.	45°5		45°7		47°1		48°1		47°9		49°6		47°7		47°4		48°4		49°5		48°1		49°5		48°6		52°2		48°2	
1896	46°4		46°9		48°1		48°7		48°5		50°3		48°5		48°3		49°2		50°3		48°7		50°3		49°4		52°9		49°0	
1897	45°8		46°1		47°9		48°9		48°7		50°9		48°5		48°0		49°1		50°7		48°4		50°5		49°3		53°2		48°9	
1898	46°9		47°7		49°2		50°0		49°7		51°6		49°6		49°2		50°2		51°4		49°7		51°5		50°4		53°9		50°0	
1899	46°5		46°6		48°3		49°6		49°2		51°4		49°0		48°3		49°5		51°4		49°3		51°2		49°9		54°3		49°5	
1900	45°9		46°1		48°2		49°5		48°9		50°6		48°7		47°8		48°9		50°2		48°4		49°8		49°0		53°4		48°9	
Means for 5 years, 1896-1900.	46°3		46°7		48°3		49°3		49°0		51°0		48°9		48°3		49°4		50°8		48°9		50°6		49°6		53°5		49°3	
1901	46°4		46°4		47°9		48°5		48°1		49°6		48°1		47°8		48°6		49°7		48°1		49°5		48°7		52°4		48°4	
1902	45°1		45°2		47°2		48°2		47°7		49°3		47°5		47°1		47°9		49°4		48°0		49°8		48°4		52°1		48°0	
1903	45°3		45°7		47°7		49°3		48°3		50°2		48°2		47°6		48°6		50°2		48°1		49°7		48°8		52°5		48°5	
Means for 38 years, 1866-1903.	45°7		46°5		47°4		48°5		48°3		49°6		48°1		47°7		48°5		50°2		48°3		49°9		48°9		—		48°5	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST YEARS FOR THE THIRTY-EIGHT YEARS, 1866 TO 1903.

		Wheat Districts.	Grazing Districts.	Wheat and Grazing Districts combined.
Rainfall	Driest	Ins. 21·0 in 1887	Ins. 30·5 in 1887	Ins. 25·8 in 1887
	Wettest	40·2 in 1872	58·0 in 1872	49·1 in 1872
Temperature	Coldest	° 45·5 in 1879	° 46·9 in 1879	° 46·2 in 1879
	Warmest	50·1 in 1868	50·7 in 1868	50·4 in 1868

375 Wt 4/04 D & S 23 17573

NOTES.

1.—Rainfall.

The values for the Rainfall in the Districts given in Table I. in the various Quarterly and Annual Summaries have been obtained from the observations published in the Weekly Weather Report for the years 1878 to 1903, supplemented by observations taken at the following stations for the years 1866–1877.

Districts.		Stations.
0. SCOTLAND, N.		Loch Broom.
		Helmsdale.
		Sandwick Manse.
1. SCOTLAND, E.		Inverness.
		Aberdeen.
		Ballater.
		Logierait.
		Stirling.
		Hawick.
2. ENGLAND, N.E.		North Shields.
		York.
		Grimsby.
		Boston.
3. ENGLAND, E.	1866 to 1875.	Fakenham.
		Beccles.
		Witham.
		Bury St. Edmunds.
	1876 & 1877.	Great Yarmouth.
		Cambridge.
		Bury St. Edmunds.
4. MIDLAND COUNTIES		Leicester.
		Derby.
		Tenbury.
		Shiffnal.
		Cirencester.
		Banbury.
		Hitchin.
5. ENGLAND, S.		Bridport.
		Selborne.
		Maidstone.
		London (Camden Town).
6. SCOTLAND, W.		Dumfries.
		Ayr.
		Castle Toward.
7. ENGLAND, N.W., and N. WALES		Llandudno.
		Manchester.
		Skipton.
8. ENGLAND, S.W., and S. WALES		Barnstaple.
		Bodmin.
		Haverfordwest.
		Rhayader.
9. IRELAND, N.		Galway.
		Bunninadden, Co. Sligo. (Doo Castle.)
		Waringstown.
		Strabane.
10. IRELAND, S.		Cork.
		Waterford.
		Killaloe.
		Portarlington.
		Monkstown, Co. Dublin.

The values for these stations were extracted chiefly from Symons' Monthly Meteorological Magazine, or from the Reports of the Rainfall Committee of the British Association, 1868–1876.

2.—Temperature.

The values for Temperature in the several Districts given in Table I. of the various Quarterly and Annual Summaries have been obtained from the observations published in the Weekly Weather Report for the years 1878–1903, supplemented by observations taken at the following stations for the years 1866–1877.

Districts.		Stations.
0. SCOTLAND, N.		Sandwick Manse.
		Stornoway.
		Dunrobin.
1. SCOTLAND, E.		Culloden.
		Aberdeen.
		Perth.
		Leith.
2. ENGLAND, N.E.		Bywell.
		North Shields.
		Hull.
3. ENGLAND, E.		Royston.
		Holkham.
		Norwich.
		Wisbeach.
		Somerleyton.
4. MIDLAND COUNTIES		Derby.
		Nottingham.
		Cardington.
		Oxford.
5. ENGLAND, S.		Marlborough.
		Greenwich.
		Streatley.
		London (Camden Town).
		Weybridge.
		Strathfield Turgiss.
		Osborne.
		Bournemouth.
		Worthing.
6. SCOTLAND, W.		Greenock.
		Cockermouth.
		Silloth.
		Carlisle.
7. ENGLAND, N.W., and N. WALES		Stonyhurst.
		Bradford.
		Leeds.
		Eccles.
		Liverpool.
		Llandudno.
8. ENGLAND, S.W., and S. WALES		Gloucester.
		Taunton.
		Barnstaple.
		Truro.
		Helston.
9. IRELAND, N.	1866 to 1873.	Belfast.
		Milltown (Banbridge).
		Armagh.†
		Athlone.*
	1874 to 1877.	Moville.
		Milltown.
		Armagh.
		Donaghadee.
10. IRELAND, S.	1866 to 1873.	Dublin.*
		Curragh Camp.
		Buttevant.*
		Cork.
		Valencia.†
	1874 to 1877.	Kingstown.
		Parsonstown.
		Cork.
		Roche's Point.
		Valencia.

The values for these Stations were obtained mainly from the returns of the Registrar General, the Journals of the Scottish Meteorological Society, the reports of the Army Medical Department, and the records of the two Irish observatories, Valencia and Armagh. The returns for Cork were furnished by R. Caulfield, Esq., LL.D.

---

* Did not commence till January 1867.

† Did not commence till January 1869.

By Order,

W. N. SHAW, Secretary.

WEEKLY WEATHER REPORT, 1903.

VOL. XX. APPENDIX II.] *Third Series.* RAIN-DAYS, RAINFALL, ACCUMULATED TEMPERATURE AND SUNSHINE. [*Price* 1*s.*

TABLE I.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF RAIN-DAYS IN EACH DISTRICT DURING THE YEAR 1903.

1903. LIMITS OF WEEKS.	0. SCOTLAND, N.		Principal Wheat-producing Districts.												Principal Grazing Districts.												CHANNEL ISLANDS.		MEANS FOR DISTRICTS 1-10 COMBINED.	
			1. SCOTLAND, E.		2. ENGLAND, N.E.		3. ENGLAND, E.		4. MIDLAND COUNTIES.		5. ENGLAND, S.		MEANS FOR WHEAT-PRODUCING DISTRICTS.		6. SCOTLAND, W.		7. ENGLAND, N.W.		8. ENGLAND, S.W.		9. IRELAND, N.		10. IRELAND, S.		MEANS FOR GRAZING DISTRICTS.					
	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.
NUMBERS OF RAIN-DAYS.																														
1903.																														
Jan. 4-10	6	6	6	6	6	6	4	4	6	6	6	6	6	6	6	6	7	7	7	7	6	6	7	7	7	7	7	7	6	6
11-17	1	7	1	7	3	9	2	6	1	7	2	8	2	8	1	7	1	8	1	8	2	8	3	10	1	8	4	11	2	8
18-24	4	11	4	11	4	13	5	11	4	11	5	13	4	12	5	12	5	13	4	12	5	13	6	16	5	13	5	16	5	13
25-31	7	18	6	17	3	16	2	13	3	14	4	17	3	15	5	17	4	17	6	18	6	19	5	21	5	18	6	22	4	17
Feb. 1-7	7	25	4	21	1	17	1	14	2	16	3	20	2	17	6	23	5	22	5	23	6	25	6	27	5	23	4	26	4	21
8-14	7	32	4	25	2	19	1	15	1	17	2	22	2	19	6	29	3	25	3	26	5	30	3	30	4	27	2	28	3	24
15-21	5	37	3	28	3	22	2	17	3	20	2	24	3	22	5	34	4	29	3	29	4	34	3	33	4	31	2	30	3	27
22-28	7	44	6	34	5	27	5	22	5	25	7	31	6	28	7	41	6	35	7	36	7	41	7	40	7	38	7	37	6	33
Mar. 1-7	6	50	5	39	4	31	6	28	5	30	6	37	5	33	7	48	6	41	6	42	7	48	6	46	6	44	7	44	6	39
8-14	5	55	4	43	3	34	3	31	4	34	3	40	3	36	7	55	5	46	5	47	5	53	5	51	6	50	5	49	4	43
15-21	7	62	6	49	3	37	2	33	4	38	3	43	4	40	7	62	5	51	5	52	7	60	6	57	6	56	5	54	5	48
22-28	7	69	6	55	5	42	5	38	5	43	5	48	5	45	6	68	5	56	6	58	7	67	7	64	6	62	6	60	5	53
Mar. 29-April 4	6	75	5	60	5	47	6	44	5	48	6	54	6	51	7	75	7	63	6	64	7	74	6	70	7	69	6	66	7	60
April 5-11	6	81	4	64	3	50	2	46	2	50	1	55	2	53	4	79	3	66	1	65	5	79	2	72	3	72	2	68	3	63
12-18	5	86	5	69	5	55	4	50	3	53	2	57	4	57	3	82	3	69	2	67	4	83	3	75	3	75	2	70	3	66
19-25	2	88	2	71	2	57	1	51	1	54	2	59	2	59	1	83	1	70	1	68	3	86	4	79	2	77	3	73	2	68
April 26-May 2	4	92	6	77	6	63	5	56	7	61	7	66	6	65	5	88	6	76	7	75	5	91	6	85	6	83	6	79	6	74
May 3-9	5	97	5	82	6	69	6	62	7	68	6	72	6	71	5	93	7	83	6	81	6	97	5	90	6	89	6	85	6	80
10-16	5	102	5	87	4	73	3	65	4	72	3	75	4	75	5	98	6	89	5	86	7	104	6	96	6	95	4	89	5	85
17-23	4	106	2	89	1	74	2	67	1	73	1	76	1	76	4	102	3	92	1	87	3	107	3	99	3	98	1	90	2	87
24-30	1	107	1	90	2	76	2	69	3	76	2	78	2	78	1	103	1	93	3	90	2	109	1	100	1	99	2	92	2	89
May 31-June 6	2	109	2	92	1	77	0	69	0	76	1	79	1	79	1	104	1	94	0	90	1	110	0	100	1	100	2	94	1	90
June 7-13	2	111	2	94	2	79	2	71	3	79	5	84	3	82	0	104	2	96	4	94	2	112	2	102	2	102	4	98	3	93
14-20	2	113	3	97	3	82	6	77	4	83	5	89	4	86	2	106	3	99	4	98	1	113	2	104	2	104	6	104	3	96
21-27	5	118	5	102	3	85	0	77	2	85	0	89	2	88	5	111	4	103	2	100	6	119	6	110	5	109	3	107	3	99
June 28-July 4	7	125	4	106	2	87	0	77	1	86	0	89	1	89	5	116	2	105	1	101	5	124	3	113	3	112	2	109	2	101
July 5-11	6	131	4	110	2	89	1	78	2	88	1	90	2	91	3	119	2	107	1	102	3	127	2	115	2	114	1	110	2	103
12-18	3	134	5	115	5	94	5	83	4	92	3	93	5	96	5	124	5	112	4	106	6	133	6	121	5	119	3	113	5	108
19-25	4	138	3	118	4	98	5	88	4	96	5	98	4	100	3	127	3	115	5	111	6	139	5	126	5	124	5	118	5	113
July 26-Aug. 1	5	143	5	123	5	103	5	93	5	101	6	104	5	105	5	132	5	120	6	117	6	145	5	131	5	129	5	123	5	118
Aug. 2-8	7	150	7	130	3	106	1	94	2	103	2	106	3	108	6	138	4	124	2	119	6	151	5	136	5	134	2	125	4	122
9-15	6	156	6	136	5	111	5	99	5	108	5	111	5	113	5	143	6	130	6	125	7	158	5	141	6	140	7	132	6	128
16-22	6	162	5	141	4	115	4	103	4	112	5	116	4	117	4	147	5	135	5	130	6	164	6	147	5	145	6	138	5	133
23-29	5	167	5	146	5	120	4	107	5	117	5	121	5	122	6	153	5	140	5	135	7	171	7	154	6	151	6	144	5	138
Aug. 30-Sept. 5	7	174	6	152	5	125	2	109	5	122	4	125	4	126	6	159	6	146	5	140	6	177	4	158	5	156	5	149	4	142
Sept. 6-12	7	181	6	158	5	130	5	114	5	127	5	130	5	131	5	164	6	152	5	145	7	184	6	164	6	162	6	155	5	147
13-19	2	183	2	160	3	133	3	117	1	128	1	131	2	133	0	164	0	152	0	145	1	185	1	165	1	163	1	156	2	149
20-26	3	186	3	163	3	136	4	121	4	132	4	135	4	137	4	168	4	156	5	150	3	188	5	170	4	167	5	161	4	153
Sept. 27-Oct. 3	6	192	6	169	6	142	5	126	5	137	6	141	6	143	7	175	7	163	6	156	6	194	6	176	6	173	6	167	6	159
Oct. 4-10	6	198	7	176	7	149	6	132	7	144	6	147	7	150	6	181	7	170	7	163	7	201	6	182	7	180	7	174	7	166
11-17	7	205	6	182	5	154	5	137	6	150	6	153	6	156	6	187	6	176	6	169	7	208	6	188	6	186	7	181	6	172
18-24	6	211	6	188	5	159	6	143	6	156	6	159	6	162	7	194	7	183	7	176	6	214	6	194	7	193	7	188	6	178
25-31	7	218	6	194	6	165	4	147	6	162	6	165	5	167	7	201	6	189	7	183	6	220	6	200	6	199	7	195	6	184
Nov. 1-7	3	221	2	196	1	166	1	148	1	163	1	166	1	168	3	204	2	191	2	185	2	222	2	202	2	201	2	197	2	186
8-14	6	227	5	201	5	171	5	153	5	168	5	171	5	173	7	211	7	198	5	190	6	228	6	208	6	207	5	202	5	191
15-21	6	233	5	206	4	175	4	157	3	171	3	174	4	177	5	216	4	202	4	194	5	233	4	212	5	212	5	207	5	196
22-28	6	239	6	212	4	179	5	162	5	176	5	179	5	182	6	222	6	208	6	200	7	240	6	218	6	218	7	214	5	201
Nov. 29-Dec. 5	5	244	3	215	4	183	4	166	2	178	3	182	3	185	3	225	4	212	3	203	5	245	4	222	4	222	7	221	4	205
Dec. 6-12	5	249	6	221	5	188	6	172	6	184	7	189	6	191	7	232	6	218	7	210	7	252	7	229	7	229	7	228	6	211
13-19	4	253	5	226	3	191	2	174	4	188	4	193	4	195	5	237	5	223	6	216	6	258	6	235	5	234	6	234	4	215
20-26	3	256	3	229	4	195	2	176	4	192	2	195	3	198	3	240	2	225	3	219	5	263	4	239	3	237	3	237	3	218
Dec. 27/03-Jan. 2/04	1	257	3	232	2	197	2	178	2	194	2	197	2	200	1	241	1	226	2	221	2	265	3	242	2	239	4	241	2	220

375 Wt 4/1904 D & S 23 17575

TABLE II.—SHOWING THE WEEKLY AND PROGRESSIVE AMOUNTS OF RAINFALL IN EACH DISTRICT DURING THE YEAR 1903.

1903. — LIMITS OF WEEKS.	0. SCOTLAND, N.		Principal Wheat-producing Districts.												Principal Grazing Districts.														CHANNEL ISLANDS.		MEANS FOR DISTRICTS 1-10 COMBINED.	
			1. SCOTLAND, E.		2. ENGLAND, N.E.		3. ENGLAND, E.		4. MIDLAND COUNTIES.		5. ENGLAND, S.		MEANS FOR WHEAT-PRODUCING DISTRICTS.		6. SCOTLAND, W.		7. ENGLAND, N.W.		8. ENGLAND, S.W.		9. IRELAND, N.		10. IRELAND, S.		MEANS FOR GRAZING DISTRICTS.							
	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.
	RAINFALL IN INCHES.																															
1903.																																
Jan. 4-10	1·08	1·08	1·93	1·93	1·35	1·35	0·59	0·59	1·18	1·18	1·11	1·11	1·23	1·23	2·29	2·29	1·65	1·65	2·26	2·26	2·38	2·38	2·22	2·22	2·16	2·16	1·37	1·37	1·70	1·70
11-17	0·06	1·14	0·01	1·94	0·29	1·64	0·12	0·71	0·08	1·26	0·23	1·34	0·15	1·38	0·01	2·30	0·04	1·69	0·19	2·45	0·36	2·74	0·77	2·99	0·28	2·44	0·63	2·00	0·21	1·91
18-24	1·87	3·01	0·60	2·54	0·19	1·83	0·40	1·11	0·34	1·60	0·24	1·58	0·35	1·73	2·09	4·39	0·69	2·38	0·68	3·13	0·81	3·55	1·34	4·33	1·12	3·56	0·35	2·35	0·73	2·64
25-31	4·19	7·20	1·41	3·95	0·08	1·91	0·33	1·44	0·31	1·91	0·53	2·11	0·53	2·26	2·08	6·47	0·89	3·27	1·18	4·31	0·83	4·38	0·92	5·25	1·18	4·74	0·77	3·12	0·86	3·50
Feb. 1-7	2·32	9·52	0·80	4·75	0·02	1·93	0·03	1·47	0·04	1·95	0·11	2·22	0·20	2·46	1·74	8·21	0·66	3·93	0·30	4·61	0·79	5·17	0·54	5·79	0·80	5·54	0·29	3·41	0·50	4·00
8-14	1·66	11·18	1·29	6·04	0·12	2·05	0·03	1·50	0·03	1·98	0·03	2·25	0·30	2·76	1·42	9·63	0·34	4·27	0·14	4·75	0·52	5·69	0·14	5·93	0·51	6·05	0·03	3·44	0·41	4·41
15-21	2·20	13·38	0·70	6·74	0·29	2·34	0·06	1·56	0·26	2·24	0·05	2·30	0·27	3·03	1·35	10·98	0·92	5·19	0·18	4·93	0·54	6·23	0·58	6·51	0·72	6·77	0·04	3·48	0·49	4·90
22-28	2·58	15·96	1·55	8·29	0·62	2·96	0·47	2·03	1·22	3·46	1·45	3·75	1·06	4·09	2·86	13·84	1·68	6·87	1·77	6·70	1·93	8·16	2·30	8·81	2·11	8·88	1·69	5·17	1·58	6·48
Mar. 1-7	1·39	17·35	0·62	8·91	0·39	3·35	0·72	2·75	1·02	4·48	1·16	4·91	0·78	4·87	0·96	14·80	1·12	7·99	2·05	8·75	1·15	9·31	1·23	10·04	1·30	10·18	1·62	6·79	1·04	7·52
8-14	1·15	18·50	0·52	9·43	0·31	3·66	0·27	3·02	0·79	5·27	0·17	5·08	0·41	5·28	1·79	16·59	0·87	8·86	0·93	9·68	0·69	9·90	1·11	11·15	1·06	11·24	0·42	7·21	0·74	8·26
15-21	2·90	21·40	1·61	11·04	0·57	4·23	0·21	3·23	0·81	6·08	0·46	5·54	0·73	6·01	2·69	19·28	1·32	10·18	0·94	10·62	1·88	11·78	1·74	12·89	1·71	12·95	0·58	7·79	1·22	9·48
22-28	1·81	23·21	1·01	12·05	0·38	4·61	0·56	3·79	0·77	6·85	0·75	6·29	0·70	6·71	2·15	21·43	0·73	10·91	1·16	11·78	1·57	13·35	2·10	14·99	1·54	14·49	0·62	8·41	1·12	10·60
Mar. 29-April 4	1·37	24·58	0·55	12·60	0·48	5·09	0·92	4·71	0·52	7·37	0·48	6·77	0·59	7·30	1·19	22·62	0·96	11·87	0·43	12·21	0·89	14·24	0·70	15·69	0·84	15·33	0·35	8·76	0·71	11·31
April 5-11	1·72	26·30	0·32	12·92	0·12	5·21	0·06	4·77	0·08	7·45	0·01	6·78	0·12	7·42	0·43	23·05	0·18	12·05	0·02	12·23	0·19	14·43	0·05	15·74	0·17	15·50	0·03	8·79	0·15	11·46
12-18	0·71	27·01	0·33	13·25	0·57	5·78	0·34	5·11	0·15	7·60	0·05	6·83	0·29	7·71	0·40	23·45	0·34	12·39	0·16	12·39	0·49	14·92	0·18	15·92	0·31	15·81	0·15	8·94	0·30	11·76
19-25	0·15	27·16	0·14	13·39	0·11	5·89	0·07	5·18	0·19	7·79	0·49	7·23	0·18	7·89	0·06	23·51	0·05	12·44	0·69	13·08	0·33	15·25	0·51	16·43	0·33	16·14	0·41	9·35	0·25	12·01
April 26-May 2	0·34	27·50	0·77	14·16	0·95	6·84	0·83	6·01	1·74	9·53	2·29	9·52	1·31	9·20	0·58	24·09	1·23	13·67	2·20	15·28	0·65	15·90	1·38	17·81	1·21	17·35	1·37	10·72	1·26	13·27
May 3-9	0·54	28·04	0·84	15·00	1·43	8·27	1·07	7·08	1·85	11·38	1·07	10·59	1·25	10·45	1·04	25·13	1·47	15·14	1·13	16·41	0·70	16·60	0·84	18·65	1·03	18·38	0·77	11·49	1·14	14·41
10-16	1·42	29·46	0·45	15·45	0·43	8·70	0·72	7·80	0·48	11·86	0·33	10·92	0·48	10·93	1·19	26·32	0·43	15·57	0·66	17·07	1·15	17·75	0·56	19·21	0·80	19·18	0·29	11·78	0·64	15·05
17-23	0·57	30·03	0·08	15·53	0·03	8·73	0·25	8·05	0·06	11·92	0·07	10·99	0·10	11·03	0·50	26·82	0·09	15·66	0·06	17·13	0·34	18·09	0·19	19·40	0·24	19·42	0·03	11·81	0·17	15·22
24-30	0·02	30·05	0·06	15·59	0·07	8·80	0·09	8·14	0·52	12·44	0·57	11·56	0·26	11·29	0·29	27·11	0·11	15·77	0·60	17·73	0·33	18·42	0·23	19·63	0·31	19·73	0·45	12·26	0·29	15·51
May 31-June 6	0·33	30·38	0·34	15·93	0·14	8·94	0·01	8·15	0·02	12·46	0·05	11·61	0·11	11·40	0·10	27·21	0·07	15·84	0·00	17·73	0·01	18·43	0·02	19·65	0·04	19·77	0·04	12·30	0·08	15·59
June 7-13	0·13	30·51	0·16	16·09	0·41	9·35	0·78	8·93	0·86	13·32	1·46	13·07	0·74	12·14	0·01	27·22	0·11	15·95	0·80	18·53	0·05	18·48	0·24	19·89	0·24	20·01	0·28	12·58	0·49	16·08
14-20	0·08	30·59	0·18	16·27	1·15	10·50	3·00	11·93	1·38	14·70	1·75	14·82	1·49	13·63	0·10	27·32	0·34	16·29	1·96	20·49	0·05	18·53	0·06	19·95	0·50	20·51	1·58	14·16	1·00	17·08
21-27	0·68	31·27	0·88	17·15	0·31	10·81	0·00	11·93	0·18	14·88	0·00	14·82	0·27	13·90	1·60	28·92	1·27	17·56	0·17	20·66	1·02	19·55	2·80	22·75	1·37	21·88	0·27	14·43	0·82	17·90
June 28-July 4	2·52	33·79	0·61	17·76	0·08	10·89	0·00	11·93	0·03	14·91	0·00	14·82	0·15	14·05	1·23	30·15	0·10	17·66	0·07	20·73	0·77	20·32	0·33	23·08	0·50	22·38	0·09	14·52	0·32	18·22
July 5-11	1·98	35·77	0·96	18·72	0·66	11·55	0·04	11·97	0·25	15·16	0·04	14·86	0·39	14·44	0·87	31·02	0·67	18·33	0·12	20·85	0·10	20·42	0·15	23·21	0·38	22·76	0·06	14·58	0·38	18·60
12-18	0·38	36·15	1·35	20·07	1·23	12·78	0·84	12·81	0·60	15·76	0·47	15·33	0·90	15·34	1·84	32·86	1·15	19·48	0·62	21·47	1·54	21·96	1·76	24·97	1·38	24·14	0·55	15·13	1·14	19·74
19-25	0·55	36·70	0·52	20·59	0·70	13·48	1·99	14·80	1·09	16·85	1·68	17·01	1·19	16·53	0·44	33·30	0·87	20·35	1·45	22·92	1·14	23·10	1·04	26·01	0·99	25·13	1·40	16·53	1·09	20·83
July 26-Aug. 1	0·46	37·16	1·44	22·03	1·46	14·94	1·14	15·94	0·67	17·52	1·33	18·34	1·21	17·74	0·79	34·09	0·78	21·13	1·14	24·06	0·80	23·90	1·13	27·14	0·93	26·06	0·93	17·46	1·07	21·90
Aug. 2-8	1·58	38·74	0·90	22·93	0·31	15·25	0·36	16·30	0·30	17·82	0·17	18·51	0·41	18·15	1·73	35·82	0·63	21·76	0·26	24·32	1·15	25·00	0·41	27·55	0·84	26·90	0·13	17·59	0·63	22·53
9-15	1·57	40·31	1·06	23·99	0·53	15·78	1·37	17·67	0·90	18·72	1·42	19·93	1·05	19·20	1·45	37·27	1·04	22·80	1·36	25·68	1·97	26·97	1·27	28·82	1·42	28·32	1·61	19·20	1·23	23·76
16-22	1·24	41·55	0·47	24·46	0·84	16·62	1·04	18·71	1·57	20·29	0·82	20·75	0·95	20·15	0·73	38·00	1·32	24·12	0·99	26·71	0·83	27·80	1·56	30·38	1·08	29·40	1·72	20·92	1·02	24·78
23-29	1·99	43·54	0·54	25·00	0·86	17·48	0·93	19·64	1·36	21·65	1·11	21·86	0·96	21·11	1·97	39·97	1·05	25·17	1·57	28·28	1·29	29·09	1·33	31·71	1·44	30·84	0·97	21·89	1·20	25·98
Aug. 30-Sept. 5	2·32	45·86	2·02	27·02	0·88	18·36	0·34	19·98	0·65	22·30	0·79	22·65	0·93	22·04	2·79	42·76	1·43	26·60	1·39	29·67	1·48	30·57	0·92	32·63	1·60	32·44	1·04	22·93	1·26	27·24
Sept. 6-12	1·98	47·84	0·89	27·91	1·28	19·64	1·22	21·20	1·49	23·79	0·66	23·31	1·11	23·15	2·21	44·97	2·69	29·29	1·34	31·01	2·49	33·06	1·50	34·13	2·05	34·49	0·77	23·70	1·58	28·82
13-19	0·03	47·87	0·08	27·99	0·13	19·77	0·23	21·43	0·02	23·81	0·02	23·33	0·10	23·25	0·00	44·97	0·01	29·30	0·00	31·01	0·10	33·16	0·35	34·48	0·09	34·58	0·07	23·77	0·10	28·92
20-26	0·17	48·04	0·25	28·24	0·31	20·08	0·33	21·76	0·51	24·32	0·40	23·73	0·36	23·61	0·63	45·60	0·39	29·69	0·89	31·90	0·28	33·44	0·78	35·26	0·60	35·18	0·68	24·45	0·48	29·40
Sept. 27-Oct. 3	1·09	49·13	0·81	29·05	0·89	20·97	0·73	22·49	0·79	25·11	0·98	24·71	0·84	24·45	1·78	47·38	1·27	30·96	1·27	33·17	1·00	34·44	1·09	36·35	1·28	36·46	0·88	25·33	1·06	30·46
Oct. 4-10	1·71	50·84	1·87	30·92	3·46	24·43	1·22	23·71	1·81	26·92	1·39	26·10	1·95	26·40	2·69	50·07	1·77	32·73	2·09	35·26	2·00	36·44	1·35	37·70	1·98	38·44	1·53	26·86	1·97	32·43
11-17	2·65	53·49	1·29	32·21	1·19	25·62	1·52	25·23	2·13	29·05	1·76	27·86	1·58	27·98	2·36	52·43	1·78	34·51	2·37	37·63	1·57	38·01	1·22	38·92	1·86	40·30	1·73	28·59	1·72	34·15
18-24	1·57	55·06	0·68	32·89	0·42	26·04	0·70	25·93	0·57	29·62	1·39	29·25	0·75	28·73	1·82	54·25	1·13	35·64	1·15	38·78	1·14	39·15	0·95	39·87	1·24	41·54	1·37	29·96	0·99	35·14
25-31	1·46	56·52	1·62	34·51	1·13	27·17	0·79	26·72	1·58	31·20	1·86	31·11	1·40	30·13	2·43	56·68	2·41	38·05	2·35	41·13	1·33	40·48	1·61	41·48	2·02	43·56	1·50	31·46	1·71	36·85
Nov. 1-7	0·53	57·05	0·15	34·66	0·27	27·44	0·25	26·97	0·29	31·49	0·22	31·33	0·24	30·37	0·49	57·17	0·56	38·61	0·59	41·72	0·22	40·70	0·34	41·82	0·44	44·00	0·33	31·79	0·34	37·19
8-14	1·50	58·55	0·56	35·22	0·28	27·72	0·32	27·29	0·29	31·78	0·25	31·58	0·34	30·71	1·77	58·94	1·02	39·63	0.40	42·12	0·91	41·61	1·09	42·91	1·04	45·04	0·51	32·30	0·69	37·88
15-21	1·63	60·18	0·43	35·65	0·42	28·14	0·30	27·59	0·13	31·91	0·13	31·71	0·28	30·99	0·56	59·50	0·42	40·05	0·21	42·33	0·26	41·87	0·20	43·11	0·33	45·37	0·34	32·64	0·31	38·19
22-28	2·19	62·37	0·95	36·60	0·56	28·70	1·04	28·63	1·03	32·94	1·15	32·86	0·94	31·93	2·06	61·56	1·42	41·47	1·52	43·85	1·41	43·28	0·81	43·92	1·44	46·81	1·31	33·95	1·19	39·38
Nov. 29-Dec. 5	1·60	63·97	0·40	37·00	1·10	29·80	0·31	28·94	0·17	33·11	0·54	33·40	0·50	32·43	1·51	63·07	1·08	42·55	0·57	44·42	0·86	44·14	0·55	44·47	0·91	47·72	1·18	35·13	0·70	40·08
Dec. 6-12	0·59	64·56	0·93	37·93	0·45	30·25	1·01	29·95	0·94	34·05	1·96	35·36	1·06	33·49	1·88	64·95	1·20	43·75	2·60	47·02	1·41	45·55	1·92	46·39	1·80	49·52	1·98	37·11	1·43	41·51
13-19	0·38	64·94	0·50	38·43	0·25	30·50	0·04	29·99	0·20	34·25	0·20	35·56	0·24	33·73	0·49	65·44	0·33	44·08	1·12	48·14	0·52	46·07	0·88	47·27	0·67	50·19	0·83	37·94	0·46	41·97
20-26	0·66	65·60	0·44	38·87	0·36	30·86	0·08	30·07	0·12	34·37	0·05	35·61	0·21	33·94	0·97	66·41	0·17	44·25	0·29	48·43	0·73	46·80	0·73	48·00	0·58	50·77	0·36	38·30	0·40	42·37
Dec. 27-Jan. 2 '04	0·08	65·68	0·18	39·05	0·09	30·95	0·06	30·13	0·06	34·43	0·10	35·71	0·10	34·04	0·05	66·46	0·10	44·35	0·24	48·67	0·38	47·18	0·61	48·61	0·28	51·05	0·22	38·52	0·19	42·56

TABLE III.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT ABOVE 42° F. IN EACH DISTRICT DURING THE YEAR 1903.

1903. — LIMITS OF WEEKS.	0. SCOTLAND, N.		Principal Wheat-producing Districts.												Principal Grazing Districts.												CHANNEL ISLANDS.		MEANS FOR DISTRICTS 1-10 COMBINED.	
			1. SCOTLAND, E.		2. ENGLAND, N.E		3. ENGLAND, E.		4. MIDLAND COUNTIES.		5. ENGLAND, S.		MEANS FOR WHEAT-PRODUCING DISTRICTS.		6. SCOTLAND, W.		7. ENGLAND, N.W.		8. ENGLAND, S.W.		9. IRELAND, N.		10. IRELAND, S.		MEANS FOR GRAZING DISTRICTS.						
	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.
DAY-DEGREES ABOVE 42° FAHRENHEIT.																														
1903.																														
Jan. 4-10	0	0	0	0	11	11	29	29	27	27	35	35	20	20	3	3	24	24	34	34	4	4	23	23	18	18	57	57	19	19
11-17	0	0	0	0	0	11	0	29	0	27	0	35	0	20	0	3	0	24	0	34	0	4	0	23	0	18	0	57	0	19
18-24	1	1	0	0	0	11	2	31	0	27	9	44	2	22	5	8	5	29	20	54	10	14	26	49	13	31	32	89	7	26
25-31	22	23	25	25	28	39	27	58	27	54	27	71	27	49	26	34	29	58	36	90	26	40	36	85	30	61	47	136	29	55
Feb. 1-7	21	44	29	54	25	64	14	72	23	77	19	90	22	71	23	57	23	81	23	113	26	66	29	114	25	86	25	161	24	79
8-14	12	56	28	82	35	99	39	111	36	113	31	121	34	105	29	86	33	114	32	145	36	102	46	160	35	121	43	204	34	113
15-21	23	79	26	108	29	128	35	146	32	145	30	151	31	136	25	111	29	143	32	177	34	136	41	201	32	153	39	243	32	145
22-28	1	80	5	113	16	144	33	179	26	171	27	178	21	157	11	122	23	166	30	207	11	147	29	230	21	174	41	284	21	166
Mar. 1-7	1	81	1	114	11	155	17	196	15	186	20	204	14	171	6	128	11	177	26	233	11	158	27	257	16	190	29	313	15	181
8-14	13	94	14	128	26	181	21	217	18	204	30	234	22	193	23	151	22	199	27	260	17	175	19	276	22	212	31	344	22	203
15-21	9	103	13	141	33	214	37	254	34	238	30	264	29	222	21	172	26	225	32	292	25	200	32	308	27	239	37	381	28	231
22-28	24	127	29	170	48	262	62	316	48	286	57	321	49	271	27	199	43	268	46	338	28	228	35	343	36	275	60	441	42	273
Mar. 29-April 4	17	144	29	199	30	292	35	351	33	319	34	355	32	303	28	227	28	296	32	370	29	257	35	378	30	305	47	488	31	304
April 5-11	24	168	38	237	39	331	37	388	39	358	38	393	38	341	35	262	34	330	42	412	36	293	49	427	39	344	49	537	39	343
12-18	0	168	1	238	5	336	14	402	13	371	16	409	10	351	9	271	6	336	15	427	10	303	19	446	12	356	25	562	11	354
19-25	17	185	18	256	16	352	21	423	25	396	37	446	24	375	22	293	22	358	36	463	28	331	34	480	28	384	34	596	26	380
April 26-May 2	34	219	28	284	35	387	48	471	46	442	54	500	42	417	39	332	41	399	55	518	37	368	47	527	44	428	62	658	43	423
May 3-9	25	244	25	309	25	412	61	532	47	489	61	561	44	461	36	368	43	442	66	584	44	412	61	588	50	478	70	728	47	470
10-16	28	272	36	345	37	449	46	578	38	527	44	605	40	501	38	406	32	474	44	628	36	448	49	637	40	518	62	790	40	510
17-23	43	315	52	397	60	509	71	649	69	596	78	683	66	567	51	457	64	538	71	699	54	502	60	697	60	578	88	878	63	573
24-30	82	397	78	475	63	372	92	741	90	686	111	794	87	654	104	561	102	640	109	808	95	597	104	801	103	681	111	989	95	668
May 31-June 6	68	465	92	567	77	649	88	829	93	785	110	904	93	747	99	660	94	734	110	918	76	673	97	898	95	776	97	1086	94	762
June 7-13	64	529	66	633	66	715	76	905	74	859	82	986	73	820	89	749	86	820	88	1006	95	768	108	1006	93	869	91	1177	83	845
14-20	43	572	43	676	46	761	55	960	48	907	60	1046	50	870	53	802	53	873	61	1067	62	830	74	1080	61	930	76	1253	56	901
21-27	80	652	91	767	102	863	106	1066	110	1017	108	1154	103	973	93	895	108	981	99	1166	95	925	101	1181	99	1029	111	1364	101	1002
June 28-July 4	92	744	113	880	130	993	146	1212	132	1149	137	1291	132	1105	109	1004	123	1104	124	1290	110	1035	121	1302	118	1147	129	1493	125	1127
July 5-11	69	813	92	972	116	1109	134	1346	131	1280	138	1429	122	1227	100	1104	111	1215	127	1417	109	1144	125	1427	114	1261	144	1637	118	1245
12-18	64	877	69	1041	95	1204	124	1470	109	1389	127	1556	105	1332	91	1195	106	1321	117	1534	98	1242	117	1544	106	1367	134	1771	106	1351
19-25	79	956	95	1136	108	1312	121	1591	117	1506	129	1685	114	1446	101	1296	114	1435	123	1657	101	1343	118	1662	112	1479	137	1908	113	1464
July 26-Aug. 1	85	1041	94	1230	109	1421	113	1704	111	1617	119	1804	109	1555	102	1398	108	1543	116	1773	97	1440	109	1771	106	1585	130	2038	107	1571
Aug. 2-8	83	1124	99	1329	117	1538	123	1827	117	1734	125	1929	116	1671	103	1501	118	1661	123	1896	103	1543	115	1886	112	1697	137	2175	114	1685
9-15	78	1202	83	1412	106	1644	125	1952	111	1845	123	2052	110	1781	93	1594	109	1770	112	2008	92	1635	106	1992	103	1800	134	2309	106	1791
16-22	63	1265	70	1482	91	1735	106	2058	93	1938	120	2172	96	1877	85	1679	92	1862	105	2113	83	1718	89	2081	91	1891	123	2432	94	1885
23-29	78	1343	82	1564	96	1831	111	2169	95	2033	113	2285	99	1976	92	1771	101	1963	104	2217	95	1813	103	2184	99	1990	124	2556	99	1984
Aug. 30-Sept. 5	69	1412	78	1642	108	1939	140	2309	113	2146	139	2424	116	2092	89	1860	106	2069	122	2339	93	1906	109	2293	104	2094	139	2695	110	2094
Sept. 6-12	50	1462	54	1696	72	2011	83	2392	72	2218	88	2512	74	2166	63	1923	74	2143	88	2427	63	1969	80	2373	73	2167	109	2804	73	2167
13-19	56	1518	55	1751	53	2064	63	2455	57	2275	70	2582	59	2225	57	1980	56	2199	67	2493	67	2036	73	2446	64	2231	88	2892	62	2229
20-26	95	1613	92	1843	102	2166	120	2575	120	2395	128	2710	112	2337	108	2088	119	2318	129	2622	113	2149	120	2566	118	2349	127	3019	114	2343
Sept. 27-Oct. 3	83	1696	84	1927	95	2261	119	2694	104	2499	123	2833	105	2442	99	2187	100	2418	116	2739	98	2247	105	2671	104	2453	127	3146	105	2448
Oct. 4-10	29	1725	29	1956	58	2319	89	2783	74	2573	102	2935	70	2513	47	2234	70	2488	95	2834	62	2309	74	2745	69	2522	112	3258	70	2518
11-17	29	1754	36	1992	48	2367	63	2846	53	2626	79	3014	56	2568	48	2282	57	2545	74	2908	48	2357	58	2803	57	2579	92	3350	57	2575
18-24	30	1784	34	2026	40	2407	48	2894	45	2671	62	3076	46	2614	46	2328	52	2597	68	2976	46	2403	57	2860	54	2633	85	3435	50	2625
25-31	34	1818	35	2061	43	2450	59	2953	40	2711	61	3137	48	2662	39	2367	44	2641	47	3023	30	2433	35	2895	39	2672	75	3510	43	2668
Nov. 1-7	31	1849	32	2093	35	2485	40	2993	34	2745	39	3176	36	2698	30	2397	33	2674	39	3062	35	2468	41	2936	36	2708	68	3578	36	2704
8-14	32	1881	34	2127	35	2520	39	3032	36	2781	48	3224	38	2736	35	2432	43	2717	56	3118	39	2507	52	2988	45	2753	70	3648	42	2746
15-21	10	1891	10	2137	14	2534	14	3046	12	2793	15	3239	13	2749	13	2445	14	2731	28	3146	26	2533	30	3018	22	2775	41	3689	18	2764
22-28	0	1891	3	2140	22	2556	28	3074	22	2815	30	3269	21	2770	21	2466	24	2755	39	3185	22	2555	34	3052	28	2803	60	3749	24	2788
Nov. 29-Dec. 5	0	1891	0	2140	0	2556	0	3074	0	2815	0	3269	0	2770	0	2466	0	2755	0	3185	0	2555	4	3056	1	2804	18	3767	0	2788
Dec. 6-12	0	1891	0	2140	1	2557	6	3080	6	2821	23	3292	7	2777	6	2472	8	2763	27	3212	6	2561	19	3075	13	2817	30	3797	10	2798
13-19	1	1892	0	2140	5	2562	6	3086	2	2823	16	3308	6	2783	4	2476	4	2767	19	3231	8	2569	23	3098	12	2829	36	3833	9	2807
20-26	4	1896	3	2143	7	2569	0	3086	3	2826	4	3312	3	2786	6	2482	10	2777	17	3248	10	2579	14	3112	11	2840	29	3862	7	2814
Dec. 27/03-Jan. 2/04	0	1896	0	2143	0	2569	0	3086	0	2826	0	3312	0	2786	0	2482	0	2777	0	3248	0	2579	1	3113	0	2840	1	3863	0	2814

TABLE IV.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT BELOW 42° F. IN EACH DISTRICT DURING THE YEAR 1903.

1903. — LIMITS OF WEEKS.	0. SCOTLAND, N.		Principal Wheat-producing Districts.												Principal Grazing Districts.												CHANNEL ISLANDS.		MEANS FOR DISTRICTS 1-10 COMBINED.	
			1. SCOTLAND, E.		2. ENGLAND, N.E.		3. ENGLAND, E.		4. MIDLAND COUNTIES.		5. ENGLAND, S.		MEANS FOR WHEAT-PRODUCING DISTRICTS.		6. SCOTLAND, W.		7. ENGLAND, N.W.		8. ENGLAND, S.W.		9. IRELAND, N.		10. IRELAND, S.		MEANS FOR GRAZING DISTRICTS.						
	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.
DAY-DEGREES BELOW 42° FAHRENHEIT.																														
1903.																														
Jan. 4-10	44	44	45	45	25	25	6	6	13	13	0	0	18	18	29	29	13	13	1	1	31	31	13	13	17	17	0	0	18	18
11-17	74	118	92	137	76	101	76	82	98	111	74	74	83	101	78	107	82	95	67	68	64	95	46	59	68	85	31	31	75	93
18-24	29	147	34	171	27	128	30	112	31	142	19	93	28	129	22	129	25	120	7	75	18	113	8	67	16	101	0	31	22	115
25-31	11	158	8	179	4	132	1	113	1	143	0	93	3	132	0	129	0	120	0	75	1	114	0	67	0	101	0	31	2	117
Feb. 1-7	12	170	18	197	13	145	25	138	14	157	11	104	16	148	3	132	9	129	4	79	6	120	4	71	5	106	2	33	11	128
8-14	24	194	14	211	2	147	3	141	0	157	0	104	4	152	2	134	0	129	0	79	0	120	0	71	0	106	0	33	2	130
15-21	11	205	13	224	10	157	18	159	11	168	6	110	12	164	0	134	5	134	1	80	0	120	0	71	1	107	0	33	6	136
22-28	30	235	32	256	25	182	10	169	15	183	4	114	17	181	25	159	13	147	8	88	31	151	16	87	19	126	0	33	18	154
Mar. 1-7	34	269	39	295	30	212	27	196	29	212	13	127	28	209	26	185	23	170	11	99	29	180	15	102	21	147	0	33	24	178
8-14	25	294	28	323	17	229	30	226	27	239	15	142	23	232	14	199	11	181	9	108	26	206	18	120	15	162	3	36	19	197
15-21	28	322	27	350	12	241	5	231	9	248	1	143	11	243	7	206	5	186	1	109	12	218	6	126	6	168	0	36	8	205
22-28	11	333	11	361	1	242	0	231	1	249	0	143	3	246	5	211	0	186	0	109	10	228	3	129	4	172	0	36	4	209
Mar. 29-April 4	23	356	17	378	13	255	7	238	12	261	3	146	10	256	11	222	8	194	3	112	8	236	4	133	7	179	0	36	9	218
April 5-11	11	367	10	388	8	263	9	247	5	266	3	149	7	263	6	228	0	194	0	112	0	236	0	133	1	180	0	36	4	222
12-18	51	418	44	432	39	302	39	286	43	309	37	186	40	303	42	270	33	227	31	143	33	269	35	168	35	215	7	43	37	259
19-25	37	455	41	473	34	336	35	321	42	351	22	208	35	338	38	308	31	258	19	162	17	286	15	183	24	239	6	49	30	289
April 26-May 2	3	458	7	480	3	339	0	321	0	351	0	208	2	340	6	314	0	258	0	162	0	286	0	183	1	240	0	49	1	290
May 3-9	7	465	6	486	0	339	0	321	0	351	0	208	1	341	0	314	0	258	0	162	0	286	0	183	0	240	0	49	1	291
10-16	11	476	7	493	3	342	1	322	4	355	0	208	3	344	3	317	1	259	0	162	0	286	0	183	1	241	0	49	2	293
17-23	7	483	6	499	0	342	0	322	0	355	0	208	1	345	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
24-30	0	483	0	499	0	342	0	322	0	355	0	208	0	345	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
May 31-June 6	0	483	0	499	0	342	0	322	0	355	0	208	0	345	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
June 7-13	0	483	0	499	0	342	0	322	0	355	0	208	0	345	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
14-20	8	491	3	502	0	342	0	322	0	355	0	208	1	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
21-27	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
June 28-July 4	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
July 5-11	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
12-18	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
19-25	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
July 26-Aug. 1	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
Aug. 2-8	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
9-15	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
16-22	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
23-29	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
Aug. 30-Sept. 5	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
Sept. 6-12	0	491	0	502	0	342	0	322	0	355	0	208	0	346	0	317	0	259	0	162	0	286	0	183	0	241	0	49	0	293
13-19	0	491	7	509	0	342	0	322	6	361	0	208	3	349	7	324	3	262	0	162	0	286	0	183	0	241	0	49	0	293
20-26	0	491	0	509	0	342	0	322	0	361	0	208	0	349	0	324	0	262	0	162	0	286	0	183	2	243	0	49	3	296
Sept. 27-Oct. 3	0	491	0	509	0	342	0	322	0	361	0	208	0	349	0	324	0	262	0	162	0	286	0	183	0	243	0	49	0	296
Oct. 4-10	12	503	4	513	0	342	0	322	0	361	0	208	1	350	0	324	0	262	0	162	0	286	0	183	0	243	0	49	0	296
11-17	0	503	1	514	0	342	0	322	0	361	0	208	0	350	0	324	0	262	0	162	0	286	0	183	0	243	0	49	0	296
18-24	2	505	5	519	0	342	0	322	0	361	0	208	1	351	0	324	0	262	0	162	0	286	0	183	0	243	0	49	1	297
25-31	0	505	4	523	0	342	0	322	0	361	0	208	1	352	0	324	0	262	0	162	7	293	6	189	3	246	0	49	2	299
Nov. 1-7	4	509	14	537	8	350	9	331	16	377	0	208	10	362	8	332	9	271	0	162	8	301	10	199	7	253	0	49	9	308
8-14	5	514	13	550	6	356	0	331	0	377	0	208	4	366	2	334	0	271	0	162	0	301	0	199	0	253	0	49	2	310
15-21	23	537	25	575	29	385	30	361	34	411	29	237	29	395	22	356	25	296	14	176	12	313	17	216	18	271	0	49	23	333
22-28	32	569	31	606	13	398	10	371	6	417	2	239	12	407	8	364	2	298	0	176	2	315	0	216	3	274	0	49	8	341
Nov. 29-Dec. 5	64	633	64	670	50	448	43	414	55	472	38	277	50	457	49	413	43	341	34	210	41	356	43	259	42	316	10	59	46	387
Dec. 6-12	29	662	43	713	33	481	29	443	33	505	14	291	30	487	19	432	22	363	12	222	23	379	11	270	18	334	0	59	24	411
13-19	29	691	36	749	25	506	18	461	24	529	6	297	22	509	24	456	20	383	4	226	19	398	9	279	15	349	0	59	18	429
20-26	27	718	32	781	20	526	18	479	18	547	16	313	21	530	25	481	19	402	4	230	18	416	15	294	16	365	0	59	19	448
Dec. 27/03-Jan. 2/04	48	766	58	839	43	569	57	536	69	616	66	379	59	589	48	529	62	464	50	280	41	457	31	325	46	411	22	81	52	500

TABLE V.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF HOURS OF BRIGHT SUNSHINE IN EACH DISTRICT REGISTERED DURING THE YEAR 1903.

1903. — LIMITS OF WEEKS.	0. SCOTLAND, N.		Principal Wheat-producing Districts.												Principal Grazing Districts.												CHANNEL ISLANDS.		MEANS FOR DISTRICTS 1-10 COMBINED.	
			1. SCOTLAND, E.		2. ENGLAND, N.E.		3. ENGLAND, E.		4. MIDLAND COUNTIES.		5. ENGLAND, S.		MEANS FOR WHEAT-PRODUCING DISTRICTS.		6. SCOTLAND, W.		7. ENGLAND, N.W.		8. ENGLAND, S.W.		9. IRELAND, N.		10. IRELAND, S.		MEANS FOR GRAZING DISTRICTS.						
	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.
NUMBERS OF HOURS OF BRIGHT SUNSHINE.																														
1903.																														
Jan. 4-10	3	3	5	5	8	8	11	11	7	7	4	4	7	7	5	5	5	5	8	8	5	5	4	4	5	5	5	5	6	6
11-17	13	16	7	12	10	18	20	31	20	27	21	25	15	22	6	11	22	27	18	26	16	21	16	20	16	21	17	22	16	22
18-24	5	21	7	19	7	25	5	36	5	32	6	31	6	28	5	16	9	36	7	33	10	31	11	31	8	29	12	34	7	29
25-31	4	25	7	26	8	33	12	48	7	39	14	45	10	38	2	18	7	43	10	43	9	40	11	42	8	37	18	52	9	38
Feb. 1-7	3	28	6	32	11	44	17	65	12	51	13	58	12	50	6	24	12	55	12	55	4	44	8	50	9	46	18	70	11	49
8-14	5	33	7	39	12	56	16	81	13	64	12	70	12	62	11	35	11	66	10	65	5	49	9	59	9	55	10	80	10	59
15-21	6	39	9	48	13	69	26	107	17	81	23	93	17	79	5	40	13	79	16	81	9	58	9	68	10	65	24	104	14	73
22-28	6	45	19	67	21	90	20	127	17	98	17	110	19	98	13	53	19	98	18	99	17	75	18	86	17	82	21	125	18	91
Mar. 1-7	16	61	23	90	25	115	16	143	20	118	15	125	20	118	27	80	24	122	23	122	31	106	32	118	27	109	23	148	23	114
8-14	18	79	22	112	22	137	33	176	18	136	33	158	25	143	19	99	19	141	21	143	22	128	23	141	21	130	35	183	23	137
15-21	15	94	17	129	20	157	26	202	22	158	29	187	23	166	12	111	13	154	24	167	18	146	15	156	17	147	34	217	20	157
22-28	17	111	23	152	23	180	40	242	24	182	35	222	29	195	19	130	19	173	24	191	23	169	21	177	21	168	37	254	25	182
Mar. 29-April 4	25	136	29	181	25	205	28	270	26	208	27	249	27	222	34	164	28	201	25	216	26	195	24	201	27	195	34	288	27	209
April 5-11	21	157	30	211	33	238	27	297	25	233	35	284	30	252	28	192	27	228	36	252	21	216	29	230	28	223	55	343	29	238
12-18	39	196	44	255	49	287	58	355	58	291	55	339	53	305	55	247	59	287	58	310	43	259	49	279	53	276	56	399	53	291
19-25	38	234	42	297	43	330	38	393	41	332	42	381	41	346	41	288	52	339	47	357	19	278	30	309	38	314	47	446	39	330
April 26-May 2	25	259	6	303	14	344	27	420	19	351	28	409	19	365	21	309	21	360	25	382	23	301	29	338	24	338	31	477	22	352
May 3-9	12	271	8	311	5	349	19	439	8	359	29	438	14	379	11	320	13	373	37	419	9	310	22	360	18	356	45	522	16	368
10-16	30	301	31	342	25	374	23	462	16	375	22	460	23	402	24	344	21	394	26	445	19	329	23	383	23	379	43	565	23	391
17-23	37	338	34	376	40	414	54	516	48	423	68	528	49	451	43	387	53	447	60	505	38	367	50	433	49	428	61	626	49	440
24-30	51	389	62	438	62	476	71	587	56	479	72	600	65	516	69	456	69	516	60	565	71	438	68	501	67	495	69	695	66	506
May 31-June 6	33	422	51	489	51	527	55	642	58	537	56	656	54	570	71	527	68	584	66	631	43	481	59	560	61	556	58	753	58	564
June 7-13	47	469	30	519	30	557	24	666	23	560	28	684	27	597	58	585	53	637	38	669	54	535	45	605	49	605	45	798	38	602
14-20	41	510	34	553	31	588	11	677	16	576	19	703	22	619	32	617	34	671	19	688	32	567	33	638	30	635	19	817	26	628
21-27	28	538	21	574	38	626	60	737	43	619	62	765	45	664	25	642	38	709	42	730	11	578	17	655	27	662	59	876	36	664
June 28-July 4	15	553	53	627	66	692	81	818	69	688	82	847	70	734	42	684	60	769	69	799	38	616	45	700	51	713	76	952	60	724
July 5-11	19	572	32	659	41	733	52	870	56	744	65	912	49	783	41	725	40	809	67	866	31	647	27	727	41	754	76	1028	45	769
12-18	42	614	19	678	20	753	25	895	22	766	42	954	26	809	24	749	28	837	38	904	11	658	24	751	25	779	57	1085	26	795
19-25	50	664	38	716	35	788	29	924	28	794	34	988	33	842	47	796	41	878	43	947	44	702	41	792	43	822	45	1130	38	833
July 26-Aug. 1	18	682	19	735	23	811	24	948	26	820	24	1012	23	865	33	829	33	911	38	985	28	730	34	826	33	855	44	1174	28	861
Aug. 2-8	21	703	41	776	51	862	52	1000	48	868	56	1068	49	914	42	871	48	959	53	1038	40	770	38	864	44	899	58	1232	47	908
9-15	27	730	28	804	36	898	40	1040	36	904	40	1108	36	950	37	908	40	999	44	1082	26	796	37	901	37	936	53	1285	37	945
16-22	32	762	51	855	44	942	44	1084	40	944	44	1152	45	995	56	964	46	1045	48	1130	44	840	44	945	48	984	42	1327	46	991
23-29	29	791	46	901	28	970	30	1114	21	965	35	1187	32	1027	36	1000	30	1075	29	1159	25	865	30	975	30	1014	45	1372	31	1022
Aug. 30-Sept. 5	15	806	28	929	32	1002	46	1160	29	994	44	1231	36	1063	30	1030	29	1104	26	1185	34	899	29	1004	30	1044	28	1400	33	1055
Sept. 6-12	26	832	36	965	37	1039	39	1199	36	1030	38	1269	37	1100	36	1066	37	1141	42	1227	27	926	33	1037	35	1079	45	1445	36	1091
13-19	48	880	37	1002	40	1079	39	1238	40	1070	44	1313	40	1140	47	1113	51	1192	50	1277	43	969	45	1082	47	1126	54	1499	43	1134
20-26	35	915	22	1024	25	1104	30	1268	26	1096	31	1344	27	1167	24	1137	26	1218	26	1303	25	994	28	1110	26	1152	31	1530	27	1161
Sept. 27-Oct. 3	20	935	21	1045	25	1129	26	1294	25	1121	23	1367	24	1191	26	1163	19	1237	25	1328	31	1025	25	1135	25	1177	26	1556	24	1185
Oct. 4-10	18	953	13	1058	21	1150	20	1314	19	1140	22	1389	19	1210	15	1178	19	1256	17	1345	22	1047	25	1160	20	1197	20	1576	20	1205
11-17	8	961	16	1074	20	1170	25	1339	24	1164	25	1414	22	1232	19	1197	19	1275	24	1369	18	1065	22	1182	20	1217	24	1600	21	1226
18-24	12	973	10	1084	6	1176	10	1349	6	1170	10	1424	9	1241	11	1208	9	1284	16	1385	21	1086	22	1204	16	1233	19	1619	13	1239
25-31	8	981	17	1101	15	1191	19	1368	16	1186	19	1443	17	1258	8	1216	11	1295	18	1403	14	1100	18	1222	14	1247	23	1642	15	1254
Nov. 1-7	11	992	19	1120	26	1217	22	1390	21	1207	25	1468	23	1281	17	1233	27	1322	33	1436	24	1124	33	1255	27	1274	30	1672	25	1279
8-14	9	1001	13	1133	9	1226	3	1393	7	1214	5	1473	7	1288	5	1238	9	1331	9	1445	8	1132	7	1262	7	1281	14	1686	7	1286
15-21	6	1007	12	1145	18	1244	15	1408	17	1231	19	1492	16	1304	23	1261	20	1351	22	1467	13	1145	19	1281	19	1300	18	1704	17	1303
22-28	2	1009	9	1154	14	1258	11	1419	11	1242	10	1502	11	1315	6	1267	6	1357	8	1475	6	1151	7	1288	7	1307	9	1713	9	1312
Nov. 29-Dec. 5	8	1017	6	1160	7	1265	9	1428	8	1250	10	1512	8	1323	9	1276	11	1368	17	1492	9	1160	16	1304	12	1319	13	1726	10	1322
Dec. 6-12	5	1022	3	1163	4	1269	2	1430	5	1255	5	1517	4	1327	5	1281	6	1374	12	1504	6	1166	10	1314	8	1327	12	1738	6	1328
13-19	2	1024	0	1163	1	1270	5	1435	3	1258	4	1521	2	1329	4	1285	4	1378	2	1506	4	1170	4	1318	4	1331	3	1741	3	1331
20-26	6	1030	1	1164	1	1271	0	1435	0	1258	1	1522	1	1330	6	1291	6	1384	9	1515	8	1178	10	1328	8	1339	6	1747	4	1335
Dec. 27/03-Jan. 2/04	8	1038	1	1165	4	1275	10	1445	6	1264	9	1531	6	1336	6	1297	6	1390	2	1517	8	1186	8	1336	6	1345	7	1754	6	1341

TABLE VI.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF **BRIGHT SUNSHINE** IN EACH DISTRICT EXPRESSED AS **PERCENTAGES** OF THE **POSSIBLE DURATION** FOR THE YEAR 1903.

1903. — Limits of Weeks.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing Districts.												Channel Islands.		Means for Districts 1-10 combined	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing Districts.					
	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.	For the Week.	From Jan. 4, 1903.
Percentages of Possible Duration of Bright Sunshine.																														
1903.																														
Jan. 4-10	7	7	10	10	16	16	21	21	14	14	8	8	13	13	9	9	9	9	14	14	10	10	7	7	9	9	9	9	11	11
11-17	28	17	13	12	18	17	36	28	39	25	37	22	27	21	12	11	41	25	31	23	31	20	28	18	29	19	29	19	29	20
18-24	11	14	14	12	13	16	9	22	9	19	11	18	11	17	10	10	15	22	13	17	18	19	19	19	14	18	19	19	12	18
25-31	7	12	12	12	14	15	21	21	12	17	23	19	17	17	3	8	11	19	16	18	16	18	19	19	13	17	28	22	15	17
Feb. 1-7	6	11	9	12	18	16	27	22	20	18	21	20	19	17	10	9	18	19	19	18	6	16	13	17	14	16	27	23	17	17
8-14	8	10	10	12	19	16	23	23	20	18	17	19	18	18	17	10	17	19	15	18	8	14	13	17	14	16	15	21	15	17
15-21	9	10	13	12	19	17	37	25	24	19	33	21	25	19	7	10	19	19	23	19	13	14	13	16	14	15	34	23	20	17
22-28	8	10	26	14	29	18	27	25	24	20	24	22	26	20	18	11	26	20	25	19	24	15	25	17	23	17	28	24	25	18
Mar. 1-7	21	11	30	17	33	20	21	25	27	21	20	21	26	21	35	14	31	22	30	21	41	19	42	21	36	19	30	25	30	20
8-14	23	13	27	18	28	21	41	27	23	21	41	24	31	22	25	16	24	22	26	21	28	20	28	22	26	20	43	27	29	21
15-21	18	14	21	18	24	22	31	27	26	21	35	25	28	23	15	15	16	21	29	22	22	20	18	21	20	20	41	29	24	21
22-28	19	14	26	19	27	22	46	29	28	22	41	27	33	24	22	16	22	21	28	23	26	21	24	22	24	20	43	30	29	22
Mar. 29-April 4	27	16	32	20	28	23	31	29	29	23	30	27	30	24	37	18	31	22	28	23	29	22	27	22	30	21	37	31	30	23
April 5-11	22	16	32	22	35	24	29	29	27	23	37	28	32	25	30	19	29	23	38	25	22	22	32	23	30	22	60	33	31	24
12-18	40	18	44	24	51	26	60	32	60	26	58	30	55	28	56	23	61	26	60	28	45	24	51	25	55	25	59	36	55	26
19-25	37	20	41	25	43	28	38	33	41	28	42	31	41	29	40	24	52	28	47	29	19	23	30	26	38	26	48	37	39	28
April 26-May 2	23	20	5	24	14	27	27	32	18	27	27	31	18	28	21	24	21	28	24	29	22	23	28	26	23	26	31	36	21	27
May 3-9	11	20	7	22	5	25	19	31	8	25	28	31	13	27	11	23	12	27	35	30	8	22	21	26	17	25	44	37	15	26
10-16	27	20	28	25	22	25	22	30	15	25	20	30	21	26	22	23	20	26	24	29	17	22	21	25	21	25	41	37	21	26
17-23	32	21	30	23	35	25	49	32	43	26	62	32	44	28	38	24	47	27	55	31	33	23	45	27	44	26	57	38	44	27
24-30	43	22	53	25	54	27	63	34	50	27	65	34	57	30	59	26	61	30	54	32	62	25	61	29	59	28	63	40	58	29
May 31-June 6	27	23	43	26	43	28	48	35	50	29	50	35	47	31	61	28	59	31	59	34	37	26	51	30	53	30	52	41	50	30
June 7-13	39	24	25	26	26	28	21	34	20	28	25	35	23	30	49	30	46	32	34	34	46	27	39	31	42	31	40	41	33	30
14-20	33	24	28	26	26	28	10	32	14	28	16	34	19	30	27	29	29	32	17	33	27	27	29	31	26	30	17	39	22	30
21-27	22	24	17	26	32	28	51	33	37	28	55	35	38	30	20	29	32	32	37	33	9	26	15	30	23	30	52	40	31	30
June 28-July 4	12	24	44	27	56	30	71	35	60	30	73	37	60	32	35	29	51	33	61	35	32	26	38	30	44	31	68	41	52	31
July 5-11	15	23	27	27	35	30	45	36	49	31	58	38	42	32	35	30	35	33	59	36	27	26	23	30	35	31	69	43	39	31
12-18	35	24	16	26	17	29	23	35	20	30	38	38	23	32	20	29	24	33	34	36	10	26	21	29	22	30	52	43	23	31
19-25	42	25	33	27	31	29	26	35	26	30	32	37	29	32	41	30	37	33	39	36	39	26	37	30	38	31	42	43	34	31
July 26-Aug. 1	16	24	17	26	21	29	22	34	24	30	22	37	21	31	30	30	30	33	35	36	26	26	31	30	30	31	42	43	26	31
Aug. 2-8	19	24	38	27	49	30	49	35	45	30	53	37	46	32	39	30	45	33	51	36	37	27	36	30	41	31	56	43	44	31
9-15	25	24	26	27	35	30	39	35	35	30	39	37	35	32	36	30	39	33	43	37	25	27	36	30	36	31	52	44	36	32
16-22	30	24	50	27	44	30	44	35	40	31	45	38	45	32	55	31	45	34	48	37	44	27	44	31	48	32	42	44	46	32
23-29	29	24	47	28	28	30	32	35	22	30	36	38	33	32	37	31	30	34	30	37	26	27	31	31	31	32	47	44	32	32
Aug. 30-Sept. 5	16	24	30	28	34	30	49	36	31	30	48	38	38	32	32	31	31	34	28	36	35	27	30	31	32	32	30	43	35	32
Sept. 6-12	28	24	39	28	41	31	43	36	40	31	42	38	41	33	40	31	40	34	47	37	30	27	36	31	38	32	50	44	40	32
13-19	54	25	42	29	46	31	45	36	46	31	52	38	46	33	54	32	59	34	58	37	50	28	51	31	54	33	62	44	49	33
20-26	41	25	26	29	29	31	36	36	31	31	37	38	32	33	28	32	31	34	31	37	30	28	34	31	31	33	37	44	32	32
Sept. 27-Oct. 3	25	25	27	29	31	31	32	36	31	31	29	38	30	33	32	32	23	34	31	37	38	28	31	31	31	32	32	44	31	33
Oct. 4-10	24	25	18	28	27	31	26	36	24	31	28	38	25	33	19	32	24	34	22	37	29	28	33	31	26	32	26	43	26	33
11-17	12	25	22	28	27	31	34	36	32	31	34	38	30	33	25	32	25	34	32	37	24	28	30	31	27	32	32	43	28	32
18-24	17	25	14	28	9	31	14	35	9	31	14	37	13	32	15	31	13	33	23	36	30	28	32	31	23	32	27	43	19	32
25-31	13	25	27	28	23	30	28	35	25	30	28	37	25	32	12	31	16	33	26	36	21	28	26	31	21	32	33	42	22	32
Nov. 1-7	18	25	31	28	41	31	35	35	32	30	39	37	36	32	28	31	41	33	50	36	38	28	51	32	42	32	46	43	39	32
8-14	16	25	22	28	15	30	4	35	11	30	8	37	11	32	9	31	15	33	15	36	13	28	11	31	11	32	22	42	11	32
15-21	11	24	22	28	31	30	26	34	29	30	32	37	28	32	41	31	34	33	36	36	23	28	32	31	33	32	29	42	30	32
22-28	4	24	17	28	26	30	19	34	19	30	17	36	20	32	11	30	10	33	14	36	11	28	13	31	13	32	15	42	16	32
Nov. 29-Dec. 5	17	24	11	28	13	30	17	34	15	30	18	36	15	31	18	30	20	33	31	36	18	28	29	31	22	31	22	41	19	31
Dec. 6-12	10	24	7	27	7	30	4	34	9	30	8	36	8	31	10	30	12	32	21	35	13	27	19	31	15	31	22	41	12	31
13-19	5	24	0	27	3	29	10	33	6	29	7	35	4	31	8	30	8	32	3	35	7	27	8	31	8	31	5	41	6	31
20-26	13	24	2	27	1	29	0	33	0	29	1	35	2	31	11	30	12	32	16	35	17	27	20	31	16	31	12	40	8	31
Dec. 27/03-Jan. 2/04	17	24	3	26	7	29	19	33	12	29	17	35	12	30	11	29	12	32	3	34	17	27	15	30	12	31	12	40	12	30